District Primary Education Programme

LEARNING ACHIEVEMENT OF CHILDREN AT THE PRIMARY LEVEL

A Baseline Assessment Study in Four Districts of Maharashtra

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FOREWORD

Maharashtra is committed to achieve the goal of Universalization of Elementary Education by the turn of the century. However, ensuring that all children get quality education according to their physical and paediatric needs is not an easy task.

The World Bank assisted DPEP (District Primary Education Programme) provides useful support and supplements the education system through interventions to augment physical needs , and by encouraging innovative approach and effective teacher training and generating community awareness and participation. The DPEP has been launched in 1993, first in five districts of Marathwada region and now expanded to Beed, Dhule, Gadchiroli and Jalana districts as phase II.

It was , therefore, again necessary to conduct an objective and comprehensive benchmark study in the newly covered districts to provide a sound empiric database on various complex issues and problems at primary school level before launching the project proper.

This report is an outcome of the Baseline Assessment Study on " **Learning Achievement of Children at the Primary School Level** " conducted in Beed , Dhule, Gadchiroli and Jalana districts in Maharashtra.

Despite considerable progress in various areas of educational development in the state , the overall situation remains far from satisfactory. Gender and spatial disparities in access to and success in elementary education still exist. It is in this context that the study of inequalities in the levels of learning achievement at primary education level across geographical areas as also within various social groups and locales becomes significant. The study has identified various factors having direct bearing on the programmes of educational development in the districts under study.

But for the sincere and concerted effort of staff and officers of the MSCERT and guidance extended by the NCERT team headed by Dr. Ved Prakash, this study could not have taken this shape of a report.

I am thankful to them all and particularly appreciate the efforts put in by Dr. L. M. Shivanekar in bringing out this document. I hope this study will certainly help all those engaged in designing and planning appropriate strategies and interventions.

V.L.Deoskar
Director
Maharashtra State Council of
Educational Research and Training

Place : PUNE- 411 030
Date : February, 1997

PREFACE

District Primary Education Programme (DPEP) is a World Bank assisted Project. Aurangabad, Nanded, Parbhani, Latur & Osmanbad are the districts selected in Phase I under this programme. Four more districts viz., Beed, Dhule, Gadchiroli & Jalana are brought, now, under DPEP in Phase II, of the programme.

Clear understanding of the present educational status plays an important role in project formulation and implementation process. A Baseline Asseeessment Study (BAS) was, therefore, conducted in four districts selected in phase II. This was an initial assessment study. Similar assessment study will also be conducted in the third and sixth years of the project.

This study is an attempt to provide a sound empiric base on a number of educational practices, issues and problems. It is hoped that this research study will assist all those concerned in designing suitable district level plans and intervention strategies to improve the quality of education at the elementary school level. Findings of the study have implications mainly for those four districts under study and may not be applicable fully to other districts in Maharashtra. Despite limitations of the study the findings will certainly guide the readers, researchers, planners and administrators through an important aspect of educational reality.

Help and support received from various sources at different levels in the conduct of the study is highly appreciated. The Government of Maharashtra, the MPSP, Directorate of Education provided every kind of administrative support throughout the conduct of the study. The present study is an outcome of the efforts made by the members of a research team at the MSCERT. We are thankful to all the members for all their organizational, managerial, and technical help.

We are grateful to Dr. Ved Prakash, Mrs Bhalla and Dr. Garg from the NCERT for spending long hours with us in organising a very motivating training programme minutely covering all aspects of the study. We would like to convey our special thanks to Dr. Smt. S. M. Inamdar, Jt. Director, Shri T. N. Londhe, Dy. Director, MSCERT, Regional Dy Directors, Education Officers (Primary) and their staff at the block levels whose organisational support, help and cooperation facilitated systematic data collection within the short scheduled time span of six weeks. We are thankful to the field staff, investigators, teachers, headmasters, students and parents without whose active participation and cooperation the study could not have been possible.

We express our gratitude to Shri V. L. Deoskar, Director, MSCERT for providing guidance and full institutional & administrative support right from the start of the project to the reporting of the study.

Smt Vasundhara Shivanekar deserves acknowledgement for her valuable timely and meticulous contribution in giving this study the final shape of a report.

I humbly acknowledge the sincere efforts of all those who have actively participated in making this study a reality.

Laxman Shivanekar

Place : PUNE -411 030
Date : February, 1997

ACRONYMS

ALA : Assessment of Learning Achievement
BAS : Baseline Assessment Study
BEO : Block Education Officer
BRC : Block Resource Centre
CPS : Central Primary School
DIET : District Institute of Education & Training
DPEP : District Primary Education Programme
DS : District Supervisor
FI : Field Investigator
GOI : Government of India
LAT : Language Achievement Test
MAT : Mathematics Achievement Test
MHRD : Ministry of Human Resource Development
MLL : Minimum Levels of Learning
MSCERT : Maharashtra State Council of Educational Research and Training
NCERT : National Council of Educational Research and Training
NT : Nomadic Tribe
OBC : Other Backward Caste
RC : Reading Comprehension
SC : Scheduled Caste
SS : State Supervisor
ST : Scheduled Tribe
TNA : Training Needs Assessment
UEE : Universalization of Elementary Education
VEC : Village Education Committee
VJ : Vimukta Jati
WM : Word Meaning

CONTENTS

FOREWORD
Preface
Acronyms
List of Tables i - vii
List of Figures viii - ix
Executive Summary 1 - 10

CHAPTER 1 INTRODUCTION 16 - 23

CHAPTER 2 ORGANIZATION OF THE STUDY 24 - 30

CHAPTER 3 ORGANIZATION OF FIELD WORK 31 - 41

CHAPTER 4 PROFILE OF SCHOOLS 42 - 56

CHAPTER 5 THE TEACHER 57 - 76

CHAPTER 6 THE DROPOUTS 77 - 104

CHAPTER 7 ACHIEVEMENT OF CLASS II STUDENTS 105 - 128

CHAPTER 8 STUDENTS' CHARACTERISTICS 129 - 148

CHAPTER 9 ACHIEVEMENT OF CLASS IV STUDENTS 149 - 176

CHAPTER 10 IMPLICATIONS OF THE STUDY 177 - 181

References

List of Tables

Table 1.1 : Percentage Distribution of Rural and Urban Population According to 1991 Census 19
Table 1.0 : Area, Sex Ratio, Population, Literacy Rates, Schools Enrolment, and Teachers in Beed, Dhule, Gadchiroli & Jalana Districts At a Glance 20
Table 1.2 : Percentage Distribution of SC and ST Population According to 1991 Census 21
Table 1.3 : Rate of Literacy According to 1991 Census 21

Table 2.1 : Districtwise Distribution of Sampling Unit 25
Table 2.2 : Districtwise and Genderwise Distribution of Total Sample (Students & Teachers) 26
Table 2.3 : Districtwise and Areawise Distribution of Total Sample (Students & Teachers) 26
Table 2.4 : Blockwise Distribution of Total Sample 27
Table 2.5 : Profile of Language Achievement Test - Class IV 28
Table 2.6 : Profile of Mathematics Achievement Test - Class IV 28
Table 2.7 : Profile of Literacy Test - Class II 29
Table 2.8 : Profile of Numeracy Test - Class II 29
Table 2.9 : Profile of Literacy and Numeracy Dropouts 30

Table 3.1 : Sample for Training Situation and Actual Situation 36

Table 4.1 : Total Enrolment and Percentage of Children in Schools (Genderwise) 42
Table 4.2 : Total Enrolment and Percentage of Children in Schools (Areawise) 43
Table 4.3 : Total Enrolment of Children in Schools (Categorywise) 44
Table 4.4 : Enrolment Percentage of Children in Schools (Categorywise) 44
Table 4.5 : Average Class Size 45
Table 4.6 : Dropout Rate (Genderwise) 45
Table 4.7 : Dropout Rate (Areawise) 45
Table 4.8 : Dropout Rate (Categorywise) 46
Table 4.9 : Percentage of Schools According to Number of Working Days 46
Table 4.10 : Percentage of Schools on the Basis of Building Ownership 47
Table 4.11 : Proximity to Other Schools 47
Table 4.12 : Percentage of Schools According to Number of Classrooms 48
Table 4.13 : Percentage of Schools Requiring Additional Classrooms 48
Table 4.14 : Percentage of Schools Having Essential Facilities 50
Table 4.15 : Percentage of Schools with Furniture and Equipment 50

Table 4.16 : Percentage of Schools with Availability of Facilities for Curricular Activities 51
Table 4.17 : Percentage of Schools Having Playgrounds 51
Table 4.18 : Percentage of Schools with Medical Facilities 53
Table 4.19 : Apparent and Effective Teacher - Pupil Ratio 53
Table 4.20 : Average Number of Teachers on Roll 53
Table 4.21 : Percentage of Schools with Vacant Posts of Teachers 56
Table 4.22 : Percentage of Schools Requiring Additional Teachers 56
Table 4.23 : Percentage of Schools Receiving Community Contribution 56
Table 5.1 · Percentage Distribution of Sample Teachers 57
Table 5.2 · Percentage Distribution of Teachers According to Age (Genderwise) 58
Table 5.3 : Percentage Distribution of Teachers According to Educational Level (Genderwise) 59
Table 5.4 : Percentage Distribution of Teachers According to Educational Level (Areawise) 59
Table 5.5 : Percentage Distribution of Teachers According to Professional Training 60
Table 5.6 : Percentage of Untrained Teachers 60
Table 5.7 : Percentage of Teachers without In-service Training 61
Table 5.8 : Percentage of Teachers Desirous of In-service Training 61
Table 5.9 : Percentage of Teachers Reporting on Available Teaching Facilities 61
Table 5.10 : Percentage of Teachers Reporting on Available Teaching Aids 62
Table 5.11 : Percentage of Teachers in Multi-Grade Teaching Situation (Genderwise) 63
Table 5.12 : Percentage of Simultaneous Allocation of Tasks by the Teacher in Multi-Grade Teaching Situations (Genderwise and Areawise) 63
Table 5.13 : Percentage of Teachers' Activities on the Basis of Time Allocation 64
Table 5.14 : Percentage of the Use of Textbooks and Teaching Material (Genderwise) 64
Table 5.15 : Use of Textbook (in Percentage) By Teachers 65
Table 5.16 : Teachers Reporting on the Source of the Preparation of Teaching Materials (in Percent) 66
Table 5.17 : Percentage Distribution of Teachers Assigning Homework 67
Table 5.18 : Percentage Distribution of Teachers Giving Homework in Language (In Terms of Number of Pages) 67
Table 5.19 : Percentage Distribution of Teachers Giving Homework in Mathematics (In Terms of Number of Sums) 68
Table 5.20 : Teacher's Expectation of Students' Competencies 68
Table 5.21 : Percentage Distribution of Teachers Reporting on No Classroom Supervision 69

Table 5.22 : Percentage of Teachers and Their Compulsion for Being in the Present School 69
Table 5.23 : Percentage Distribution of Teachers on the Basis of Assistance from the Head Teacher /Principal (Genderwise & Areawise) 70
Table 5.24 : Percentage Distribution of Teachers on the Basis of Assistance from BEO (Genderwise) 70
Table 5.25 : Percentage Distribution of Teachers on the Basis of Assistance from Primary Teachers (Genderwise & Areawise) 71
Table 5.26 : Preference of Teachers for Schooling of Their Wards (Genderwise & Areawise) 71
Table 5.27 : Percentage Distribution of Head Teachers in Sampled Schools (Genderwise & Categorywise) 72
Table 5.28 : Percentage of Head Teacher's Involvement in Teaching Related Activities (Genderwise) 72
Table 5.29 : Methods Used for Evaluation of Teachers by Head Teachers 73
Table 5.30 : Prioritising of Perceptions of Head Teachers in School Performance 74
Table 5.31 . Percentage of Head Teachers' Involvement in School Related Activities 75
Table 5.32 : Percentage of Head Teachers Authorised to Sanction Expenditure 76
Table 5.33 : Days Spent by the Head Teacher on Non-Academic Activities 76

Table 6.1 : Percentage Distribution of Dropouts (Genderwise) 77
Table 6.2 : Percentage Distribution of Dropouts (Areawise) 79
Table 6.3 : Percentage Distribution of Dropouts (Categorywise) 79
Table 6.4 : Percentage Distribution of Dropouts (Agewise) 79
Table 6.5 : Percentage of Dropouts on the Basis of Number of Detentions in School 79
Table 6.6 : Percentage of Dropouts Repeating a Class (Genderwise) 82
Table 6.7 : Percentage Distribution of Dropouts According to Class Repetition 82
Table 6.8 : Percentage Distribution of Dropouts on the Basis of Last ClassAttended 83
Table 6.9 : Reasons For Being a Dropout (Genderwise) 84
Table 6.10 : Reasons For Being a Dropout (Areawise) 85
Table 6.11 : Educational Aspirations of Dropouts 86
Table 6.12 : Percentage of Dropouts Doing Paid Work 86
Table 6.13 : Percentage of Dropouts in Different Occupations 87
Table 6.14 : Nutritional Status of Dropouts (Percentage) 88
Table 6.15 : Percentage Distribution of Dropouts on the Basis of Physical Impairment 88
Table 6.16 : Percentage Distribution of Dropouts on the Basis of Illness 88
Table 6.17 : Percentage Distribution of Dropouts on the Basis of Educational Level of Parent 89

Table 6.18 : Percentage Distribution of Dropouts on the Basis of Occupational Status of Parents 89
Table 6.19 : Head of the Family of Dropouts 90
Table 6.20 : Mean Achievement of Dropouts in Literacy (Genderwise) 90
Table 6.21 : Mean Achievement of Dropouts in Literacy (Areawise) 91
Table 6.22 : Mean Achievement of Dropouts in Literacy (Categorywise) 91
Table 6.23 : Comparison of Achievement of Dropouts in Literacy (Categorywise) 91
Table 6.24 : Percentage of Dropouts on Different Levels of Achievement in Literacy (Genderwise) 92
Table 6.25 : Percentage of Dropouts on Different Levels of Achievement in Literacy (Areawise) 93
Table 6.26 : Percentage of Dropouts on Different Levels of Achievement in Literacy (Categorywise) 94
Table 6.27 : Mean Achievement of Dropouts in Numeracy (Genderwise) 98
Table 6.28 : Mean Achievement of Dropouts in Numeracy (Areawise) 98
Table 6.29 : Mean Achievement of Dropouts in Numeracy (Categorywise) 98
Table 6.30 : Comparison of Achievement of Dropouts in Numeracy (Categorywise) 99
Table 6.31 : Percentage of Dropouts on Different Levels of Achievement in Numeracy (Genderwise) 101
Table 6.32 : Percentage of Dropouts on Different Levels of Achievement in Numeracy (Areawise) 103

Table 7.1 : Percentage Distribution of Class II Students (Agewise) 105
Table 7.2 : Percentage of Class II Students with Pre-School Experience 105
Table 7.3 : Percentage of Class II Students on the Basis of Class Repetition 106
Table 7.4 : Mean Achievement of Class II Students in Language 106
Table 7.5 : Mean Achievement of Class II Students in Language (Genderwise) 106
Table 7.6 : Mean Achievement of Class II Students in Language (Areawise) 107
Table 7.7 : Mean Achievement of Class II Students in Language (Categorywise) 107
Table 7.8 : Percentage Distribution of Class II Students on Different Levels of Achievement in Language (Genderwise) 108
Table 7.9 : Percentage Distribution of Class II Students on Different Levels of Achievement in Language (Areawise) 111

Table7.10 : Percentage Distribution of Class II Students on Different Levels of Achievement in Language (Categorywise) 114
Table 7.11 : Mean Achievement of Class II Students in Mathematics 117
Table 7.12 : Mean Achievement of Class II Students in Mathematics (Genderwise) 117
Table 7.13 : Mean Achievement of Class II Students in Mathematics (Areawise) 118
Table 7.14 : Mean Achievement of Class II Students in Mathematics (Categorywise) 118
Table 7.15 : Percentage Distribution of Class II Students on the Basis of Levels of Achievement in Mathematics (Genderwise) 119
Table 7.16 : Percentage Distribution of Class II Students on the Basis of Levels of Achievement in Mathematics (Areawise) 122
Table 7.17 : Percentage Distribution of Class II Students on the Basis of Levels of Achievement in Mathematics (Categorywise) 125
Table 7.18 : Five Most Difficult Items in Literacy 128
Table 7.19 : Five Most Difficult Items in Numeracy 128

Table 8.1 : Percentage Distribution of Class IV Students (Genderwise) 129
Table 8.2 : Percentage Distribution of Class IV Students (Areawise) 129
Table 8.3 : Percentage Distribution of Class IV Students (Categorywise) 130
Table 8.4 : Percentage Distribution of Class IV Students on the Basis of Caste and Gender 130
Table 8.5 : Percentage Distribution of Class IV Students on the Basis of Age (Years) 131
Table 8.6 : Relationship of the Pupil with Head of the Family 131
Table 8.7 : Percentage Distribution of Class IV Students on the Basis of Educational Level of Parents 132
Table 8.8 : Level of Illiteracy among Parents 135
Table 8.9 : Percentage Distribution of Pupils on the Basis of Father's Agricultural Occupation 135
Table 8.10 : Percentage Distribution of Pupils on the Basis of Father's (Other than Agriculture) Occupation 136
Table 8.11 : Percentage Distribution of Class IV Students on the Basis of Ownership of Assets 136
Table 8.12 : Districtwise Mean and Standard Deviation on the Basis of Land Holding / Owning 137
Table 8.13 : Districtwise Mean and Standard Deviation on the Basis of Animals' Ownership 137

Table 8.14 : Percentage Distribution of Class IV Students Doing Paid Work 137
Table 8.14 a : Nature of Work 137
Table 8.15 : Nutritional Status of Students of Class IV 138
Table 8.16 : Distribution of Class IV Students on the Basis of Physical Impairment 138
Table 8.17 : Distribution of Class IV Students on the Basis of Illness 139
Table 8.18 : Percentage of Class IV Students on the Basis of Pre-School Education 139
Table 8.19 : Percentage of Mother tongue and Medium of Instruction 139
Table 8.20 : Percentage of Class IV Students Getting Academic Support From the Family 140
Table 8.21 : Distribution of Class IV Students According to the Assistance Provided by Family Member 140
Table 8.22 : Percentage Distribution of Students on the Basis of Educational Aspiration 141
Table 8.23 : Reasons For not Intending to Study (Percentages) 142
Table 8.24 : Percentage of Class IV Students on the Basis of Number of Textbooks 142
Table 8.25 : Percentage of Class IV Students Having Essential Textbooks 143
Table 8.26 : Percentage of Class IV Students on the Basis of Source of Getting Textbooks 143
Table 8.27 : Percentage of Class IV Students Who purchased Textbooks 143
Table 8.28 : Access of Class IV Students to Reading Material Other than Textbooks 144
Table 8.29 : Access of Class IV Students to Newspaper 144
Table 8.30 . Percentages of Class IV Students Reporting Different Instructional Activities in the Classroom (Genderwise) 144
Table 8.31 : Percentages of Class IV Students Reporting Different Instructional Activities in the Classroom (Areawise) 145
Table 8.32 : Activities in the Absence of Teacher 146
Table 8.33 : Percentage of Class IV Students on the Basis of Detention 146
Table 8.34 : Percentage of Class IV Students on the Basis of Detention in Various Classes 146
Table 8.35 : Categorywise Failure of Students 148

Table 9.1 : Mean Achievement of Class IV Students in Language 150
Table 9.2 : Mean Achievement of Class IV Students in Language (Genderwise) 150
Table 9.3 : Mean Achievement of Class IV Students in Language (Areawise) 150

Table 9.4 : Mean Achievement of Class IV Students in Language (Categorywise) 151
Table 9.5 : Level of Significance of Class IV Students in Language (Castewise) 151
Table 9.6 : Percentage of Class IV Students on Different Levels of Achievement in Language 151
Table 9.7 : Percentage of Class IV Students on Different Levels of Achievement in Language (Genderwise) 157
Table 9.8 : Percentage of Class IV Students on Different Levels of Achievement in Language (Areawise) 158
Table 9.9 : Percentage of Class IV Students on Different Levels of Achievement in Language (Categorywise) 161
Table 9.10 : Mean Achievement of Class IV Students in Mathematics 162
Table 9.11 . Mean Achievement of Class IV Students in Mathematics (Genderwise) 162
Table 9.12 : Mean Achievement of Class IV Students in Mathematics (Areawise) 163
Table 9.13 : Mean Achievement of Class IV Students in Mathematics (Categorywise) 163
Table 9.14 : Level of Significance of Class IV Students in Mathematics (Categorywise) 163
Table 9.15 : Percentage Distribution of Students on the Basis of Levels of Achievement in Mathematics (Genderwise) 164
Table 9.16 : Percentage Distribution of Students on the Basis of Levels of Achievement in Mathematics (Areawise) 170
Table 9.17 : Percentage Distribution of Students on the Basis of Levels of Achievement in Mathematics (Categorywise) 172
Table 9.18 : Correlation Between Achievement in Mathematics and Language 173
Table 9.19 : Areas of Difficulty in Word Meaning 173
Table 9.20 : Areas of Difficulty in Reading Comprehension 174
Table 9.21 : Areas of Difficulty in Mathematics 175
Table 9.22 : Average Scores of Schools in Language 176
Table 9.23 : Average Scores of Schools in Mathematics 176

List Of Figures

Figure 1 : Map of Maharashtra - Districts Under DPEP Phase I & Phase II 11
Figure 2 : Beed District - Selected Blocks & Urban Areas 12
Figure 3 : Dhule District - Selected Blocks & Urban Areas 13
Figure 4 : Gadchiroli District - Selected Blocks & Urban Areas 14
Figure 5 : Jalana District - Selected Blocks & Urban Areas 15
Figure 6 : Sampling Framework 32
Figure 4.13 : Percentage of Schools Requiring Additional Classrooms 49
Figure 4.17 : Percentage of Schools Having Playgrounds 52
Figure 4.18 : Percentage of Schools With Medical Facilities 54
Figure 4.19 : Apparent and Effective Teacher - Pupil Ratio 55

Figure 6.1 : Percentage Distribution of Dropouts (Genderwise) 78
Figure 6.2 : Percentage Distribution of Dropouts (Areawise) 80
Figure 6.3 : Percentage Distribution of Dropouts (Categorywise) 81
Figure 6.24 : Percentage of Dropouts on Different Levels of Achievement in Literacy(Genderwise) 95
Figure 6.25 : Percentage of Dropouts on Different Levels of Achievement in Literacy (Areawise) 96
Figure 6.26 : Percentage of Dropouts on Different Levels of Achievement in Literacy(Categorywise) 97
Figure 6.30 : Comparison of Achievement of Dropouts in Numeracy (Genderwise) 100
Figure 6.31 : Percentage of Dropouts on Different Levels of Achievement in Numeracy (Genderwise) 102
Figure 6.32 : Percentage of Dropouts on Different Levels of Achievement in Numeracy (Areawise) 104

Figure 7.8a : Percentage Distribution of Class II Students on Different Levels of Achievement in Language - Letter Reading (Genderwise) 109
Figure 7.8b : Percentage Distribution of Class II Students on Different Levels of Achievement in Language - Word Meaning (WM) (Genderwise) 110
Figure 7.9a : Percentage Distribution of Class II Students on Different Levels of Achievement in Language - Letter Reading (Areawise) 112
Figure 7.9b : Percentage Distribution of Class II Students on Different Levels of Achievement in Language - Word Meaning (WM) (Areawise) 113
Figure 7.10a : Percentage Distribution of Class II Students on Different Levels of Achievement in Language - Word Meaning (WM) (Categorywise) 115
Figure 7.10b: Percentage Distribution of Class II Students on Different Levels of Achievement in Language - Letter Reading (Categorywise) 116
Figure 7.15a : Percentage Distribution of Class II Students on the Basis of Levels of Achievement in Mathematics -Number Recognition (Genderwise) 120

Figure 7.15b : Percentage Distribution of Class II Students on the Basis of Levels of Achievement in Mathematics -Addition and Subtraction (Genderwise) 121

Figure 7.16a : Percentage Distribution of Class II Students on the Basis of Levels of Achievement in Mathematics -Number Recognition (Areawise) 123

Figure 7.16b : Percentage Distribution of Class II Students on the Basis of Levels of Achievement in Mathematics - Addition and Subtraction (Areawise) 124

Figure 7.17a : Percentage Distribution of Class II Students on the Basis of Levels of Achievement in Mathematics -Number Recognition (Categorywise) 126

Figure 7.17b : Percentage Distribution of Class II Students on the Basis of Levels of Achievement in Mathematics - Addition and Subtraction (Categorywise) 127

Figure 8.7a : Percentage Distribution of Class IV Students on the Basis of Educational Level of Parents (Beed & Dhule) 133

Figure 8.7b : Percentage Distribution of Class IV Students on the Basis of Educational Level of Parents (Gadchiroli & Jalana) 134

Figure 8.34 : Percentage of Class IV Students on the Basis of Detention in Various Classes 147

Figure 9.6 : Percentage of Class IV Students on Different Levels of Achievement in Language 152

Figure 9.6a : Scorewise Distribution of Class IV Students on Language Achievement Test (Beed) 153

Figure 9.6b : Scorewise Distribution of Class IV Students on Language Achievement Test (Dhule) 154

Figure 9.6c : Scorewise Distribution of Class IV Students on Language Achievement Test (Gadchiroli) 155

Figure 9.6d : Scorewise Distribution of Class IV Students on Language Achievement Test (Jalana) 156

Figure 9.8a : Percentage of Class IV Students on Different Levels of Achievement in Language -Word Meaning (WM) (Areawise) 159

Figure 9.8b : Percentage of Class IV Students on Different Levels of Achievement in Language -Reading Comprehension (Areawise) 160

Figure 9.15 : Percentage Distribution of Class IV Students on the Basis of Levels of Achievement in Mathematics (Genderwise) 165

Figure 9.15a : Scorewise Distribution of Class IV Students on Mathematics Achievement Test (Beed) 166

Figure 9.15b : Scorewise Distribution of Class IV Students on Mathematics Achievement Test (Dhule) 167

Figure 9.15c : Scorewise Distribution of Class IV Students on Mathematics Achievement Test (Gadchiroli) 168

Figure 9.15d : Scorewise Distribution of Class IV Students on Mathematics Achievement Test (Jalana) 169

Figure 9.16 : Percentage Distribution of Class IV Students on the Basis of Levels of Achievement in Mathematics (Areawise) 171

Design and Procedure

Schools were taken as basic units of sampling . A multi- stage sampling design was adopted for the purpose. It was decided to include 10% of the total number of schools or maximum 45 schools from each district. A list of all schools (Class I - IV) was prepared and 45 schools from each district were selected as per the sampling design. A total of 180 primary schools thus selected from the four districts were included in the study.

Further allocation of rural and urban schools was based on the ratio of population in these areas according to the 1991 Census. The sampling design provided for the study of 30 students from Class IV , 20 students from Class II , five teachers including the head teacher and a lady teacher, if any, and five dropouts from each of the sampled schools. However, in most schools 30 students were not available in Class IV and the school records on dropouts were not properly maintained .

Majority schools had less than five teachers and some schools were without a lady teacher. As a result , the total sample from the four districts comprised of 180 primary schools , 2655 Class IV students, 2579 Class II students, 281 dropouts and 444 teachers including head teachers.

Following Achievement Tests, Various Schedules and Field Notes were the research tools used to collect the information on various variables related to the Learning Achievement of children at the primary school level.

A . Learning Achievement Tests

1.	Language Achievement Test	(LAT)	- Class IV
2.	Mathematics Achievement Test	(MAT)	- Class IV
3.	Literacy and Numeracy test	(LNT)	- Class II
4.	Simple Literacy and Numeracy Test	(SLNT)	- Dropouts

All the tests developed by the NCERT were used after translation in Marathi.

B. Schedules for the Study of Context and Process Variables

1.	Student Present Schedule	(SP)	for Class IV students
2.	Dropout Student schedule	(SD)	
3.	Teacher Schedule	(TS)	
4.	School Record Schedule	(SR)	

C. Field Notes

The task of data collection was carried out by a team of 60 field investigators , and 12-16 field supervisors under the guidance of four State Supervisors. All the field investigators were selected from the respective districts.

Unemployed graduates , preferably trained, were interviewed at the district head quarters and selected to work as field investigators. The entire team received an

intensive training for a period of 10 days (from 9th September to 18th September , 1996) in all districts. It was the participatory mode of training . Field work and data collection activities were carried out from 19th September, 1996 to 25th October, 1996. A three tier scrutiny procedure was followed to ensure quality of data collected .

Field scrutiny on daily basis was done by the field supervisors. State Supervisor carried out the sample checking at the district level and final scrutiny at the MSCERT headquarters was carried out at the third level. Each item was checked for its validity prior to data entry. The data were further verified and necessary modifications were made. The data were fed to the computer and various analyses were carried out for the report compilation through appropriate programmes for data verification , ensuring code accuracy, consistency and integrity.

Major Findings

Student Characteristics

1. 2655 Class IV and 2579 Class II students in the total sample of 5234 students comprised of 2931 boys and 2303 girls respectively (Table 2.2). The proportion of girls was less than boys in Class IV as well as Class II sample. Representation of students from various categories varies from district to district. Majority of sampled Class IV and Class II students belonged to Others Category followed by OBC & SC and ST groups in Beed and Jalana districts, whereas a high percentage of Others OBC and SC groups in tribal district - Dhule with Gadchiroli a large proportion of students belonged to OBC category followed by ST, SC and Others category (Table 8.4).

2. Majority of sampled students belonged to the families where father's main occupation reported was agriculture or farming.

3. There were 59% illiterate mothers and 24% illiterate fathers. Students reported that father and elder brother or sister were the main sources of academic help and support. Academic support received from family members was the least in Dhule district (47%) . Mothers could not help the students in doing homework. This certainly has a direct effect on the learning achievement of children.

4. Majority of the sampled students belonged to 9- 10 year age group. Percentage of older boys than girls was more in Class IV . This may be linked to late enrolment in Class I , Repetition and the higher dropout rate of older girls.

5. Nearly all the sampled students had the required textbooks , besides this there was a large number of students having access to reading material as well.

6. Majority of students reported that a class teacher attended the classes regularly .

7. About 32 to 66 percent Class IV students reported that they were given dictation (40 - 66%), Mathematical problems (32-60%), home work, (40 -66 %) and tests regularly, but the test feedback was given to only 30 to 65 % children on a regular basis.

8. Educational aspiration of Class IV students was quite high with 63 to 77 percent . They had a desire to go to secondary and higher secondary levels. A fairly good proportion of students from all the four districts liked to continue their education further upto graduation and above (11- 28 %)

9. Students repeating a class in all the four districts were approximately 3- 15 percent with the maximum number of students repeating Class II and Class III in Dhule, followed by Gadchiroli and Jalana district, whereas it was the highest in Class I in Beed district.

Paid Work

Percentage of Class IV students doing some kind of paid work was very low. It was the highest in Jalana district (2.74%) followed by Dhule (2.46%), Gadchiroli (0.84%) and Beed (0.42%).

Learning Achievement of Class IV Students

1. About 6 - 15 percent students from Class IV reached the MLLs. This indicates very low attainment level of students. The sampled students performed better on Word Meaning test than Reading Comprehension . The Minimum score was 5 out of 44 in Gadchiroli district as compared to 10, 11 and 13 in Beed, Dhule and Jalana districts respectively. Boys performed better than girls. The maximum score was 29 out of 44 in Jalana district when compared to the scores 23, 25 and 27 in Gadchiroli, Beed and Dhule districts respectively.

2. Achievement Level in Language was very low with 16 - 27 percent students not reaching the minimum of 40 percent in Word Meaning, while 62 to 79 percent could not reach MLLs on Reading Comprehension Test. About 21 - 26 percent students approached the Mastery level in Word Meaning, whereas only 5 - 11 percent reached Mastery level in Reading Comprehension. Only 4 - 7 percent students could achieve Mastery in Word Meaning, whereas 2 - 7 percent could reach this level in Reading Comprehension.

3. The performance of sampled students in Mathematics was poorer than in Language with a minimum score of 3 out of 40 in Dhule and Gadchiroli district. Boys in Beed, Dhule and Jalana districts performed better than girls. Students from rural schools showed superiority over their urban counterparts. This needs further research . Achievement levels differed from group to group in all the four districts. Such a poor performance at the end of four years of schooling is an indicator of poor and ineffective educational process.

4. About 66 - 78 percent sampled students failed to achieve MLLs in all the four districts. No girls were found achieving Mastery level in Beed, Dhuleand Jalana districts, while Gadchiroli had only 0.84 percent girls achieving Mastery level.

5. Castewise performance of students indicated that the SC and ST category students achieved low scores . A negligible percentage of students from ST category could achieve the MLLs . Specific interventions need to be introduced to raise the achievement level of ST students .

6. Schoolwise analyses revealed that 40 - 57 percent schools scored below 40 percent in Language , whereas this number rose to 67 - 78 percent for Mathematics. School based plans and specific intervention strategies need to be implemented for improving the level of achievement of Class IV students in Language and Mathematics.

Learning Achievement of Class II Students

1. The performance of Class II students was quite unsatisfactory in Literacy and Numeracy both . They did better in Letter Reading than Word Reading. They experienced more difficulty while reading words than reading letters.

2. There were areawise variations . Rural school students performed better than the urban students in all the four districts. Urban school students showed poor performance, as bright students joined private schools . This was observed almost in all districts. This requires review of policy and planning .

3. About 20 - 39 percent Class II students in all the districts could not achieve MLLs in Letter Reading while about 39 - 65 percent students could not do so in Word Reading. Percentage of students achieving Mastery in Letter Reading ranged from 37 - 67 percent. It was the lowest for Dhule , while a large percentage of students was seen in Beed (66.67%) district.

4. In Mathematics students showed a better performance in Number Recognition than Addition and Subtraction. Boys performed better than girls in achieving Mastery in Numeracy in all the four districts. There were differences between various groups. Low achievement level in Class II may be one of the causes of poor performance at the Class IV level.

5. About 10 -18 percent students in Class II remained at zero level of Number Recognition competency , whereas this figure rose to 17 to 40 percent on Addition and Subtraction competencies. Nearly 18 - 45 percent students in all the four districts could achieve Mastery in Number Recognition competency , while 16 - 46 percent students achieved mastery level in Numeracy - Addition & Subtraction competency. This indicates that students could do mental operations more easily than recognising or reading and writing numbers. Effective learning experiences need to be given in Number Recognition competency .

Achievement of Dropouts

1. A total number of 281 dropouts selected from four districts were administered a simple Literacy and Numeracy test. About 4 to 26 per cent of dropouts could achieve mastery level, while 22 -65 percent dropouts could not achieve MLLs in Literacy. Dropouts in Gadchiroli district scored the lowest on Literacy test.

2. About 70 - 78 percent dropouts could not achieve MLLs in Numeracy test. A negligible percentage of dropouts could achieve mastery in Numeracy test.

3. Girls showed poor performance on Literacy and Numeracy tests both. This indicates a very low attainment of the out of school children in the four districts. Dropouts reported **Parents do not Want, Have to assist in Household work, Studies Too difficult** as the main reasons for being a dropout. Parent awareness programmes need to be launched in all the four districts under study.

4. About 39 - 48 percent dropouts did not want to study, while 13 - 28 percent expressed their desire to complete the primary school level and 18 - 28 percent would like to continue their studies further upto secondary level.

Teachers

1. A total number of 444 teachers were interviewed, from all the four districts out of which 25, 40, 18 and 21 percent were women teachers in Beed, Dhule, Gadchiroli and Jalana districts respectively. Teachers belonging to SC and ST category were below the population proportion.

2. Inspite of good attendance of teachers in schools the achievement levels of students were found to be very low.

3. Quite a large percentage of teachers interviewed were untrained in Gadchiroli (23%) with 17, 13 and 4 percent in Dhule, Beed and Jalana districts respectively. Backlog of untrained teachers in Gadchiroli district was the largest. Appropriate measures in this regard need to be taken in all the four districts. Nearly 31 - 84 percent teachers had received no in-service training in the last five years. More than 78 percent teachers expressed their desire to undergo in-service training.

4. Most of the teachers reported availability of basic facilities such as blackboards, chalk-sticks and dusters. About 70 percent teachers reported on availability of teaching aids like flash cards, globes, charts and teacher's guides. However, districtwise variations in the availability of teaching materials were noticed. 33 percent teachers reported that there were no chairs for themselves. Percentage of the availability of cupboards in schools reported was also very low.

5. OB materials were available in almost all schools, but were not in regular use. Teachers did not know how to make use of the available materials in a classroom. Training programmes need to be organised to empower teachers in handling kits appropriately.

6. Majority of the teachers (79- 98 %) relied on the textbook as the main teaching aid in the classroom. About 3 - 6 percent teachers also reported preparing teaching aids on their own in Beed, Dhule and Gadchiroli districts. But it is surprising to observe no teachers reporting on preparing materials in Jalana district. Training programmes for developing low -cost material need to be organised for teachers in all the four districts. Most of the teachers (83 - 99%) used the textbook for reading and explaining to students, for asking children to read it on their own and for assigning homework from the textbook.

7. Only 4- 7 percent teachers reported lack of classroom supervision by the head teacher and BEO. This indicates that there is a system of supervision. But the teachers expressed their dissatisfaction over the present supervision as they could not get academic guidance. Supervision needs improvement. Teachers expressed their satisfaction about the help they got from the head teacher. But 60% of teachers in Jalana district reported that the head teacher was not helpful. A fairly good proportion of teachers reported that they got help from primary teachers in Beed(46%) and Dhule (44%) but not in Jalana (32%) and Gadchiroli (9%) districts. District plans should take note of this while planning training programmes.

8. Nearly 27 - 42 percent teachers were there in schools due to compulsion, whereas majority expressed satisfaction on being there in a particular school. The teachers were seen non-motivated. This could be a factor contributing to the low achievement of students. 95.14 percent teachers in Dhule district assigned homework regularly to students with 91.21, 78.69 and 44.19 percent in Jalana, Beed and Gadchiroli districts respectively. Teachers in Gadchiroli district need to be properly guided in giving homework to students. Giving one or two pages homework in Language and 4 - 6 sums in Mathematics was observed as a general practice in all the four districts under study.

9. Teachers preferred Government schools for schooling of their wards.

Head Teachers

1. Out of the total number of sampled 444 teachers, 180 were the head teachers interviewed. Only 4 - 22 percent were women head teachers. Majority of head teachers belonged to SC, ST and OBC category.

2. Head teachers had both administrative responsibilities and teaching tasks to perform. They spent most of their time on administrative and non-academic school activities. Average total days spent by a head teacher on non- academic activities ranged from 5 to 22 percent days.

3. Checking of diaries (47 - 96%) , planning monthly tests (38 - 98 %) and evaluating the test papers (38 - 100 %) and observation of classroom teaching were the tasks they performed . But keeping diaries by the teachers was far from satisfactory. It was rather surprising to note that the percentage of head teacher's involvement in teaching related activities was the least in Jalana (27- 40%) and Gadchiroli (20 - 98%) as compared to Dhule (22 - 96%) and Beed (13 - 100 %) districts. There was a wide variation between districts.

4. Head teachers reported that they tried their best to improve the school performance but held others responsible for poor performance. Commitment of teachers, motivation of students, attitude and co-operation of parents were reported by the head teachers as the factors responsible for the performance of school.

5. Head teachers used classroom observation as the main method of evaluating teachers.

School and Participation

1. School records were not properly maintained. It was very difficult to define and locate dropouts. Dropouts remained on the roll in many schools. Enrolment figures for successive classes did not match with the stated number of detentions, transfers and dropouts.

2. Girls enrolment was lower than boys in all the four districts under study. Average class size from Class I to Class IV progressively declined. The maximum decline was seen in Jalana district from 29 in Class I to 19 in Class IV .

3. Sampled schools reported working days between 201 and 250 in a year. But in Gadchiroli district 24% schools were found to be running for 176 - 200 days only. Area specific holidays/ working days need to be fixed. Classroom teaching-learning needs to be improved.

4. About 73 - 96 percent schools had their own buildings , while the rest of the schools were being run in rent free buildings . One , two or three additional classrooms and also major repairs were required by most schools.

5. Majority of schools had no safe drinking water or toilet facilities , particularly for girls. About 7 - 28 percent schools had no electric connections for schools. This needs to be planned on school basis.

6. 33 to 56 percent schools had playgrounds within the school premises. Medical facilities in sampled schools seemed to be satisfactory.

8. Majority of the schools did not receive financial support from the community. Village Education Committees need to be motivated to elicit co-operation from the community.

Implications of the Study

The Baseline Assessment Study was conducted in Beed, Dhule, Gadchiroli and Jalana districts in Maharashtra. The data revealed that there was uniformly low performance in Language and Mathematics of sampled Class II, Class IV and dropout students. Majority of the sampled students did not achieve MLLs (40%).

Wide differences were observed between schools within a district. Therefore schoolwise need based planning needs to be done and appropriate interventions be introduced.

Girls performed significantly lower than boys. Students from Rural areas scored higher than their urban counterparts. Area and gender specific planning is required at district level.Attendance, in case of ST students was poor due to seasonal migration of families for 9 - 10 months in a year. This was the major issue in Dhule district for poor attendance of students in schools.

As learning achievement level of students was observed to be very low in all the four districts, in-service teacher training, effective supervision, classroom instruction activities and practices need to be improved. The teacher used the textbook as the main teaching aid as a reader in the classroom. The students showed poor performance on reading test. This reflects on the limitations of purely textbook related teaching in a classroom.

Teacher's different language was also one of the factors adversely affecting understanding and classroom communication particularly in tribal districts. Specific programmes are required to be planned for improving the communication skills of teachers in using the language or dialect of children particularly at induction stage and supplementary material.

Enrolment of girls was lower than that of boys. Special measures need to be taken to increase the participation of girls in primary schools and arrest the dropout rate.

Most of the dropouts were repeaters. This is one of the indicators of poor quality of teaching. Pre-service and in -service training programmes need to be reviewed to make those effective in order to improve teacher's classroom transaction competence.

Majority of the teachers were in school due to personal or family reasons and job satisfaction. In depth studies may reveal that job satisfaction is being perceived as personal adjustment by teachers. The transfer and posting policy need to be reviewed and rationalised to boost motivation among teachers.

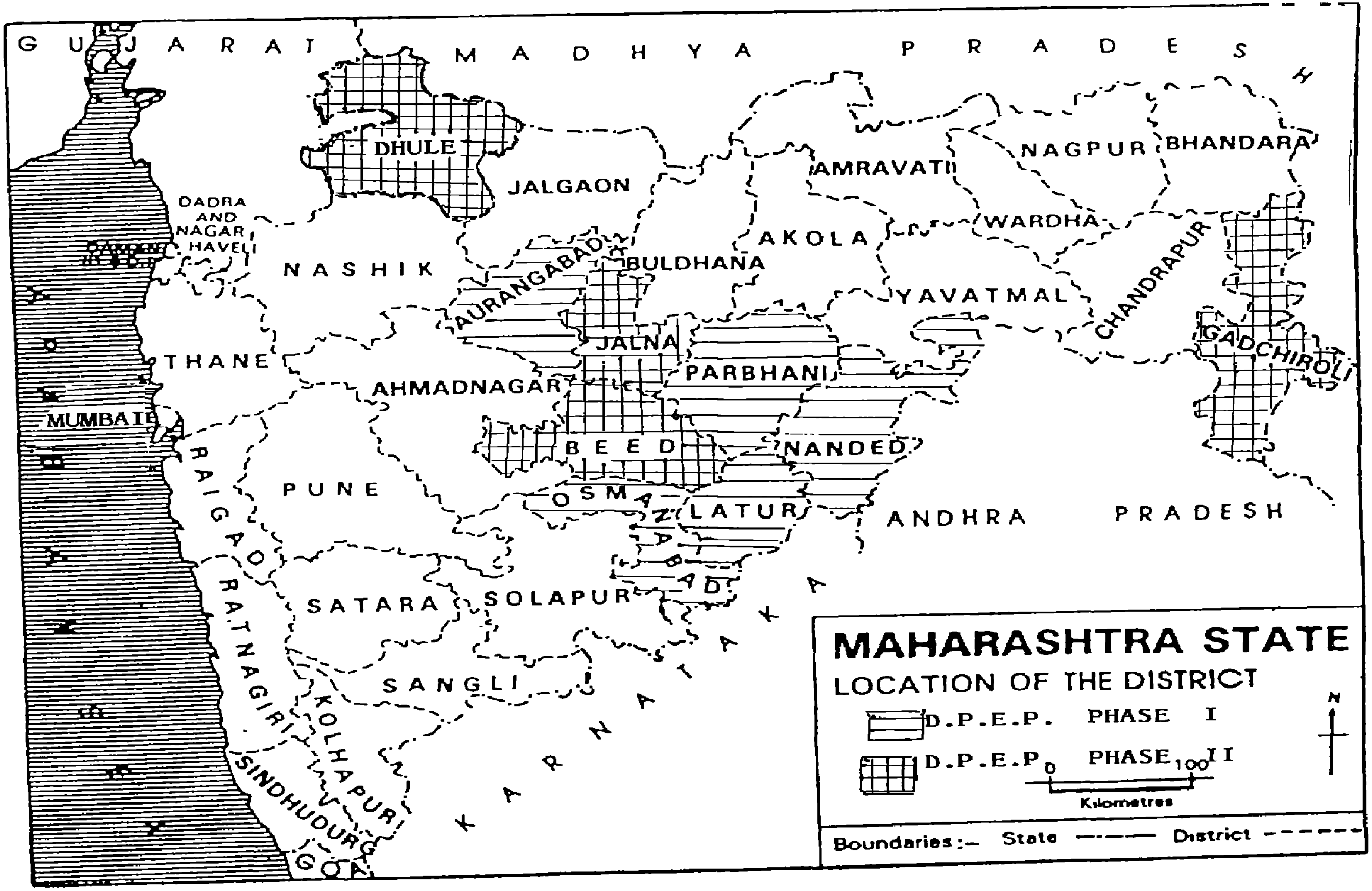
Percentage of illiterate parents, especially mothers was very high (52 - 67%). Students received academic help mainly from their siblings. Awareness in parents and community participation needs to be developed and encouraged.

It was observed that the teachers poorly maintained school records. Field investigators found it difficult to identify and locate the dropouts , transfer cases and daily attendance of the students on roll. Teachers and head teachers need to be trained in systematic record keeping and maintaining it properly.

A fairly large number of schools did not have basic facilities such as safe drinking water, separate toilets for girls and boys, adequate number of classrooms , teaching aids, etc. Plans need to be drawn upon school basis.

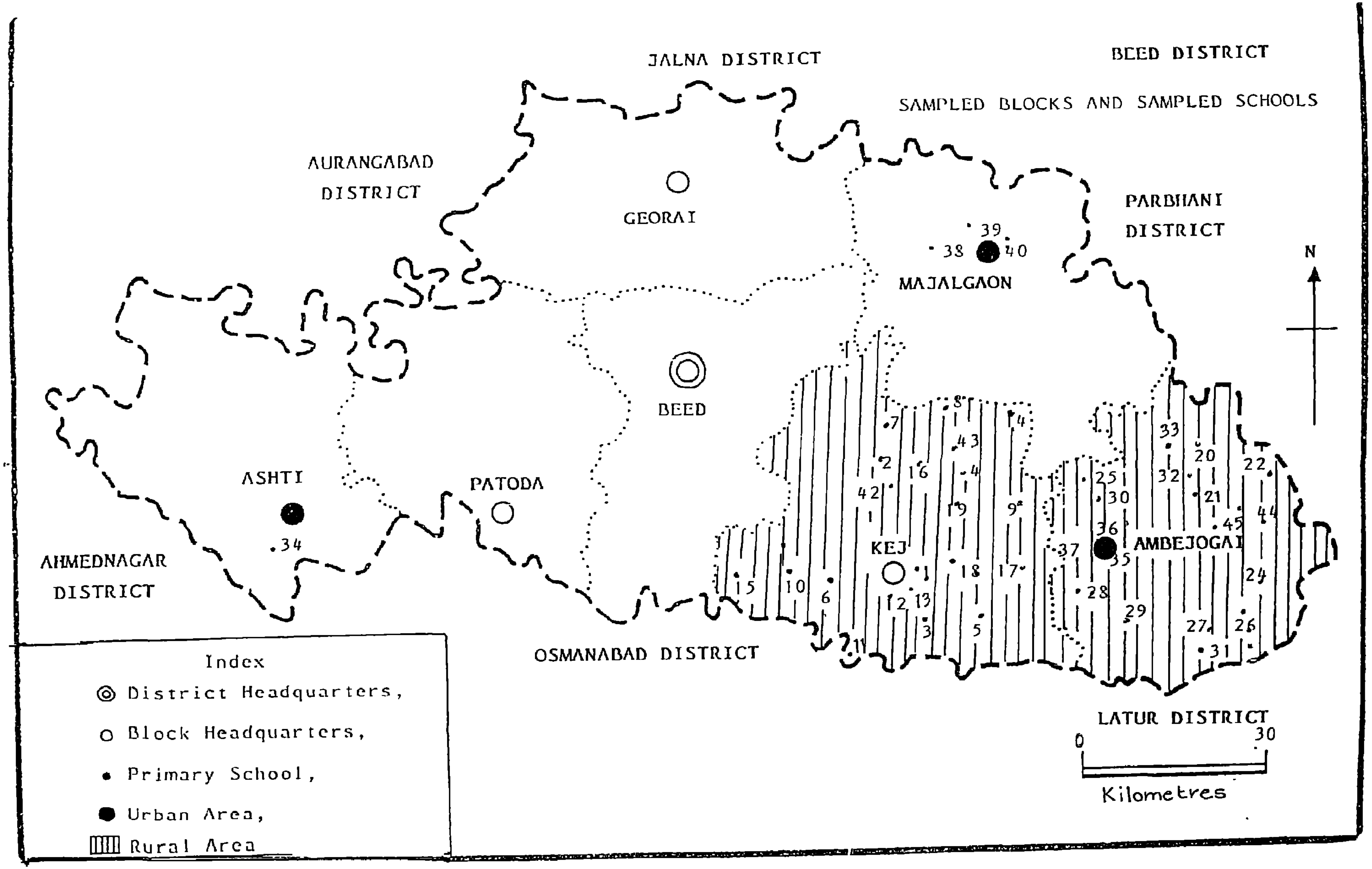
All schools in the four districts are functioning under respective CPS . Teacher development activities , continuous supervision , monitoring and evaluation by the CPS head is already being practised . It needs to be made more systematic and effective.

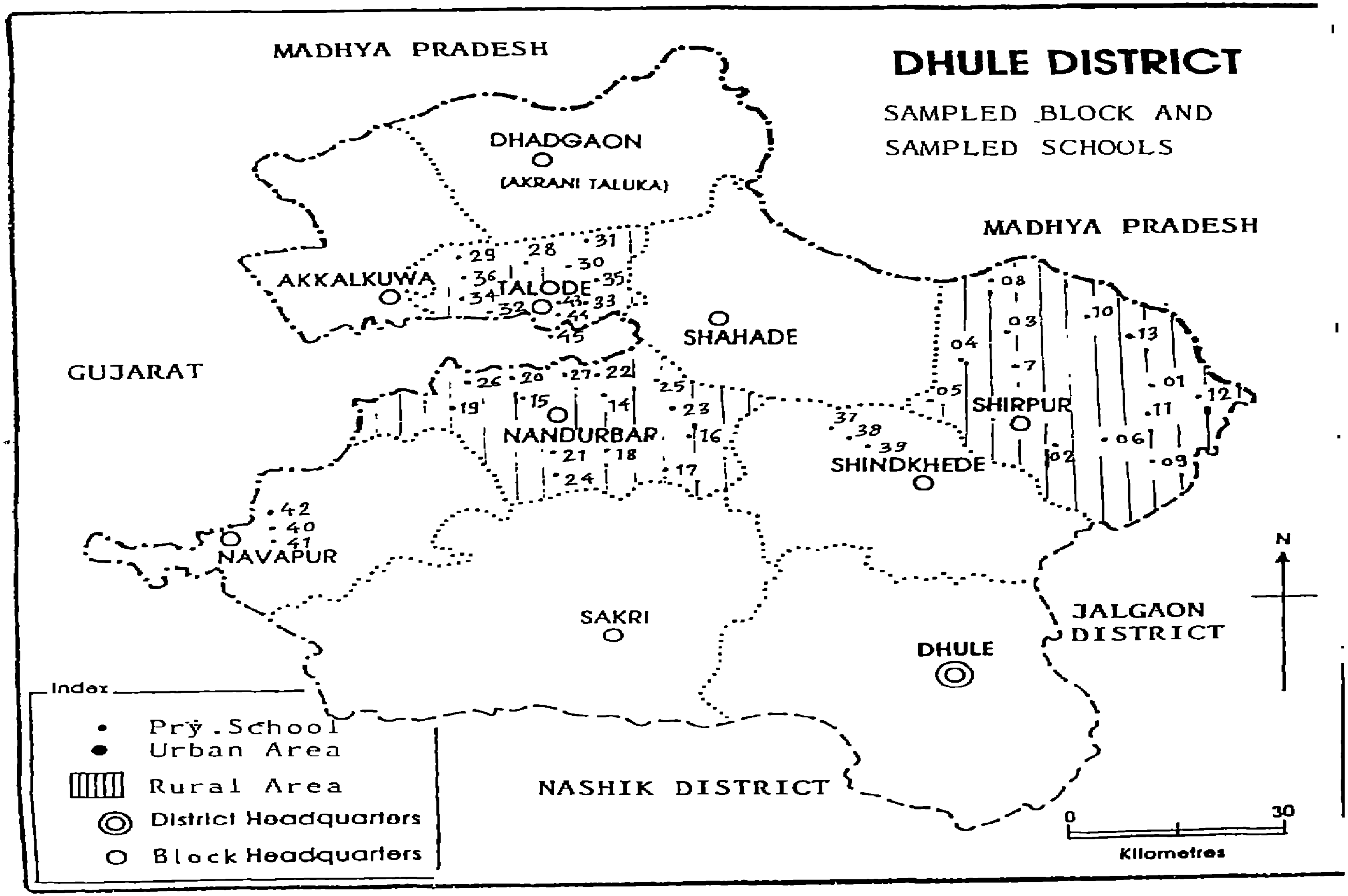
□


MAHARASHTRA STATE
LOCATION OF THE DISTRICT
D.P.E.P. PHASE I
D.P.E.P PHASE II
0
100
Kilometres
N
Boundaries :- State District
GUJARAT
MADHYA PRADESH
ANDHRA PRADESH
KARNATAKA
GOA
DADRA AND NAGAR HAVELI
DAMAN
DHULE
JALGAON
NASHIK
THANE
MUMBAI
RAIGAD
RATNAGIRI
SINDHUDURG
KOLHAPUR
SANGLI
SATARA
PUNE
AHMADNAGAR
AURANGABAD
BULDHANA
JALNA
BEED
OSMANABAD
SOLAPUR
LATUR
NANDED
PARBHANI
AKOLA
AMRAVATI
YAVATMAL
WARDHA
NAGPUR
BHANDARA
CHANDRAPUR
GADCHIROLI

BEED DISTRICT

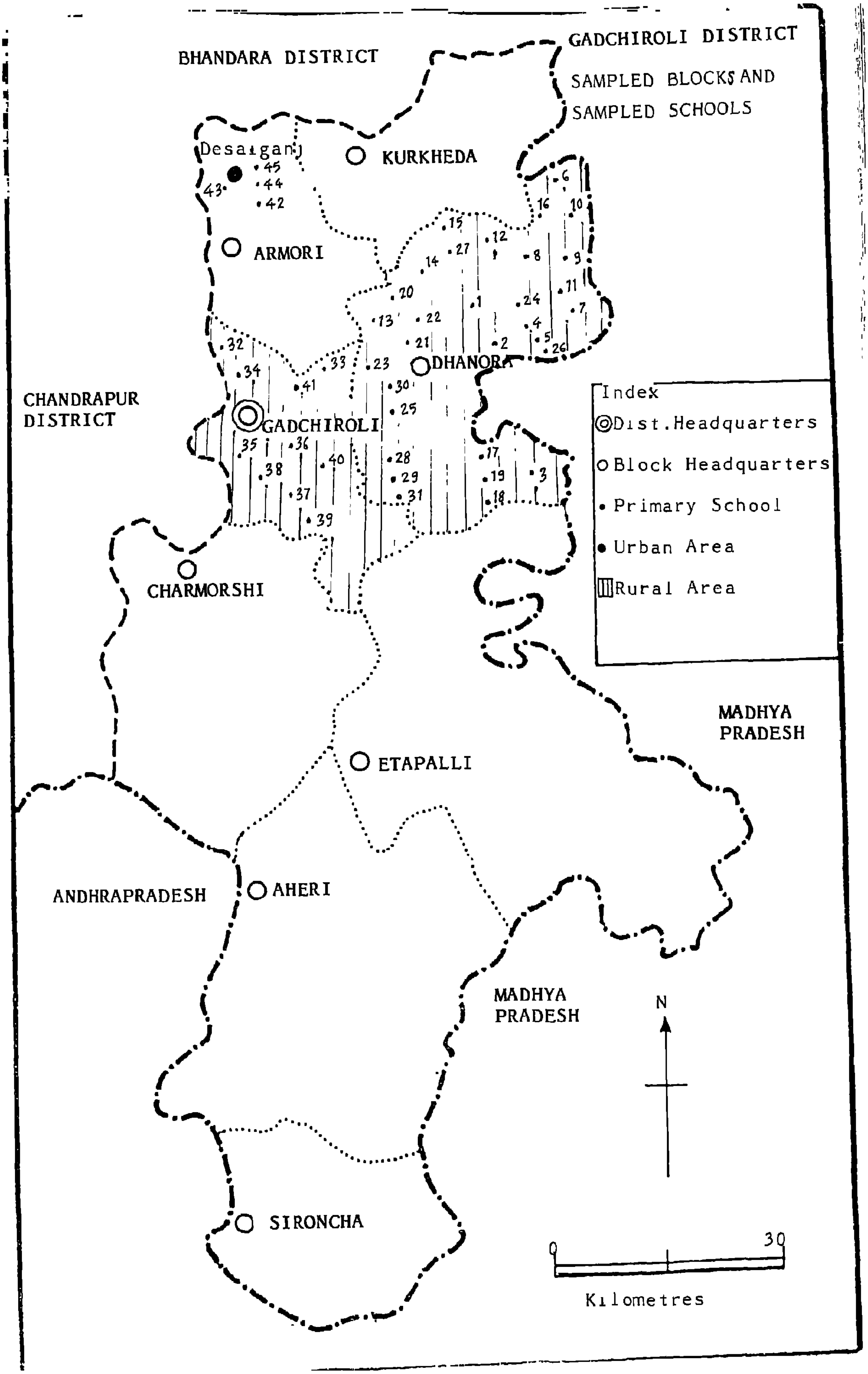
SAMPLED BLOCKS AND SAMPLED SCHOOLS

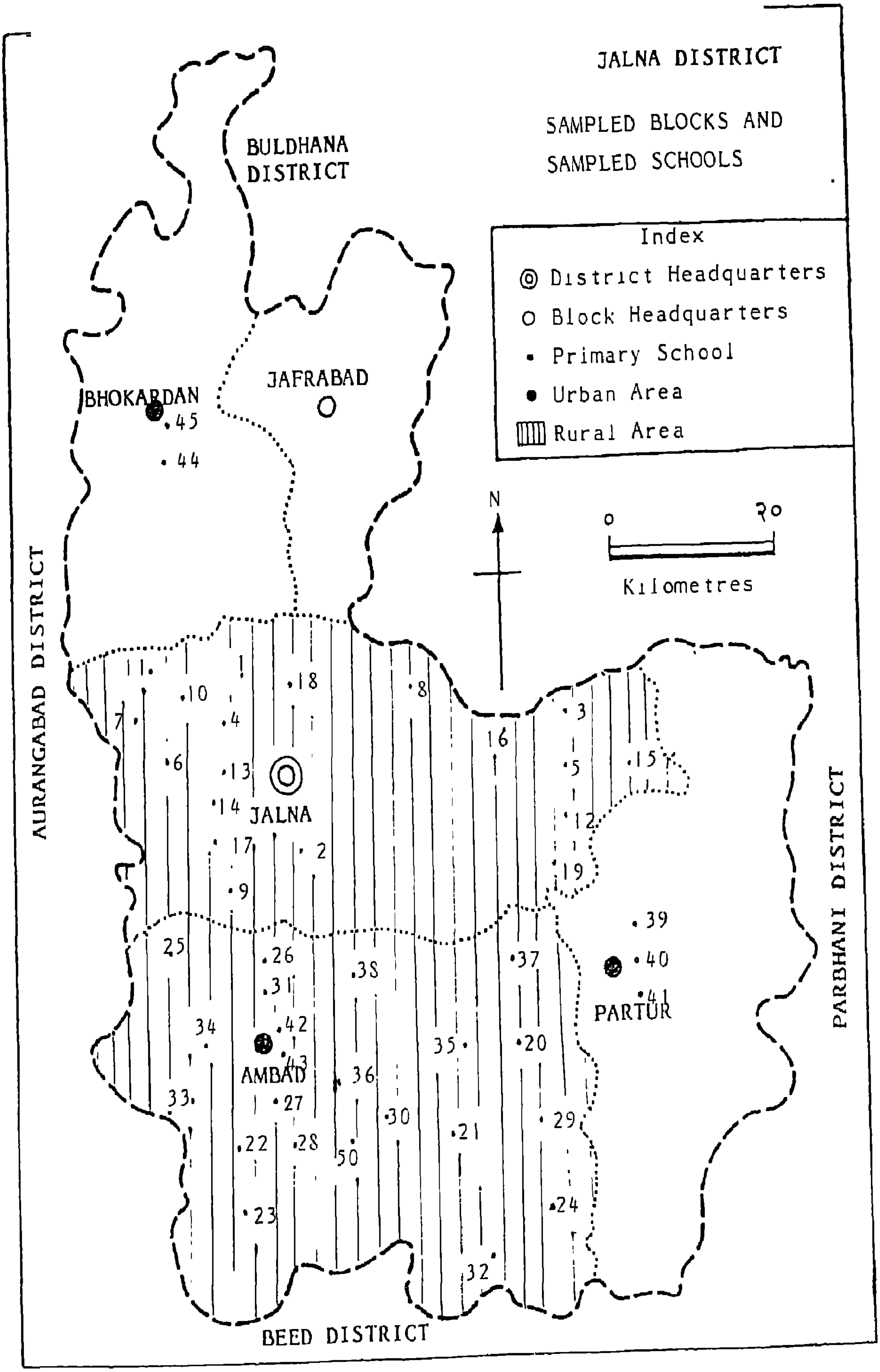




DHULE DISTRICT

SAMPLED BLOCK AND SAMPLED SCHOOLS


GADCHIROLI DISTRICT
SAMPLED BLOCKS AND SAMPLED SCHOOLS


JALNA DISTRICT

SAMPLED BLOCKS AND SAMPLED SCHOOLS

CHAPTER 1

INTRODUCTION

The socio- economic background, and educational conditions of the selected districts are presented in this chapter with a focus on the need of the study.

Background

The District Primary Education Programme (DPEP) was launched in 79 districts of eight educationally backward states of the country. It was formally approved and adopted in November, 1993. The programme was expanded further and now 110 districts are covered under this programme during the Eighth Five Year Plan .

The DPEP intends to develop a replicable, sustainable and cost-effective programme:

- to reduce differences in enrolment , dropouts and learning achievement among gender and social groups (SC, ST,OBC, etc.) to less than 5%.
- to reduce overall primary dropout rates for all students to less than 10%.
- to increase average primary learning achievement by 25% over measured base line levels.
- to provide access to all children to primary education through formal or non- formal systems.

The DPEP programme had been introduced in India with a view to operationalising the philosophy of quality education at the primary school level. Five districts viz., Aurangabad, Nanded, Parbhani, Latur, and Osmanabad were selected in Phase I of the programme.

The DPEP is mainly a district specific project. Baseline Assessment Studies pertaining to different aspects of primary school education have already been conducted in the states of Assam (4), Haryana (4), Madhya Pradesh (19), Maharashtra (5), Orissa (4), Kerala (4), Karnataka (4), Tamilnadu (3), Andhra Pradesh (5), Bihar (10), West Bengal (5), Himachal Pradesh (4), Gujarat (3) and Orissa (5) by various agencies working at the National and State level covering as many as 79 districts.

Baseline Assessment Studies in selected areas of elementary education in five districts of Maharashtra were undertaken by the NCERT in the past to provide a sound research base for facilitating the process of formulation of district level plans and interventions. The DPEP aims at promoting mastery learning through MLLs approach in a planned manner with rigorous appraisals and systematic monitoring and evaluation of the plans implemented.

The study was aimed at meeting the constitutional commitment of providing free and compulsory education to all children upto 14 years of age by the end of this century.

National commitment to Universalization of Elementary Education is reaffirmed by the NPA and POA of 1992. Realisation of UEE called for Universal Access , Universal Participation and Universal Achievement. Children of primary school going age-group, therefore, became the target group of beneficiaries of this programme. Education at the primary school level is a very complex process affected by a number of factors. Educational inputs required by children in various districts cannot be the same.

This entails decentralised local and area specific planning and management. The DPEP seeks to operationalise the NPE- POA strategies of achieving UEE by transforming, toning and accelerating the primary education process.

Education Scenario in Maharashtra

Maharashtra came into existence as a State in 1960 . It has 31 districts and 4, 08, 555 inhabited villages and cities spread over a total area of 3, 07, 713 sq. kms . The total population of the state, as per the 1991 Census is 7.89 crores out of which 61.31% people live in rural areas.

Percentages of the SC and ST groups in the total population are 13.6% and 9.3% respectively. The literacy rate of the state (64.87%) is above the national average. There are wide regional and gender disparities in literacy of males and females. Among women in the rural areas it is only 40.96 %. Literacy rates are further lower in Gadchiroli and Dhule districts . As per the 1994-95 statistics there were 61, 689 primary schools in the state with an enrolment of 1.15 crore children and 2.94 Lakhs teachers out of whom 38.26 percent teachers were women working there. The primary schools (91.5%) in the state are mainly run by the Local Self Governments like ZPs, Municipal Councils , Corporations , etc.

In the context of Universalization of Elementary Education , enrolment ratios for Class I to Class V and Class VI to Class VIII were 125.96% and 79.50% respectively (1991-92 Statistics).

Dropout

The dropout rate at the end of Class V was 32% and at the end of Class VIII , it was 52% in 1991-92. The situation worsens with respect to girls belonging to SC and ST communities. A large percentage of SC & ST girls in rural areas remained out of the formal School system.

The 42 nd National Sample Survey reveals the reasons why children leave school before completing primary education. Many children in the rural areas lose interest in education on account of dull and uninteresting teaching. It turns nearly 21% of boys and 33% of girls away from schooling. About 49% of the girls belonging to ST category in rural area drop out due to lack of interest in education. Nearly 50% boys and 38% girls leave school for economic reasons. Efforts are being made to arrest the dropout rate of pupils on economic ground .

Schemes like mid-day meal, free uniforms , book banks, attendance allowance to girls belonging to SC , ST, NT & VJ population attending I to IV Classes have been introduced .

Quality of Primary Education

Surveys in the area of academic achievement of primary school children reveal that the achievement levels are low in Language and Mathematics . Irregular attendance of pupils and teachers both is recorded as one of the factors responsible for unsatisfactory quality of primary education. Retention figures are no better.

Teacher Training

There are 243 primary teacher training institutes (D.Ed. Colleges) in the state with 13,280 as an intake capacity per year. Entrance qualification has been enhanced from SSC (X) to HSC (XII) since 1993. District Institutes of Education and Training (DIETs) have become functional in 29 districts in the state. A correspondence course is run by the SCERT to train untrained primary teachers who are already in service . A provision for recurrent in-service training of primary school teachers is also made. It is organised at 68 centres (102 divisions including DIETs) with an intake capacity of 40, 800 teachers per year.

Education of Girls and Backward Classes

The overall proportion of girls enrolled in Class I is 46.9%. 12.43 % schools in the state are located in the Tribal Sub-Plan area. Special facilities are provided for the minority communities . They can receive education in their mother tongue.

People's Participation in Primary Education

Maharashtra has a long tradition of voluntary efforts in the field of education. Shaikshanik Uthav (Educational Upsurge) and the Savitribai Phule Foster Parent Scheme are the outcomes of community participation in the education of primary school children. A Task Force was appointed to look into the recommendations of various committees and study groups in the context of Universalization of Primary Education and to chalk out a practical Plan of Action for the state with following objectives:

1. Every child attaining the age of six years must be enrolled
2. He/She must study upto 14 years of age and
3. He/She must get quality education and achieve expected levels of learning.

Facilities for Primary Education

Efforts for opening new schools in hilly / remote parts of the state are encouraged. School have been opened for a habitat of 100, if no other school exists within one kilometer radius.

Other Measures

Besides Student Welfare Schemes, steps have been taken to :

1. raise the percentage of women teachers .

2. improve the teacher training programmes.

3. bring every 10 primary schools run by Zilla Parishads under one Central Primary School (CPS). In all 4860 CPS centres have become operational in the state.

4. supply Radio-cum-cassette players to 33, 366 primary schools under OB scheme. Besides this , colour TV sets are made available in 10, 000 primary schools in the state.

5. form Village Education Committees in each revenue village to ensure control of and support to primary schools. In all 27, 550 Village Education Committees are functioning to strengthen the education system through community participation.

In the background of this education scenario, a bench mark survey on crucial key educational indicators such as enrolment , retention , attendance , achievement levels and their correlates is necessary for developing and implementing an effective plan of action to realise the goal of Education For All by the turn of the century.

Districts Under DPEP Phase II

Beed, Dhule , Gadchiroli and Jalana districts are brought under DPEP phase II. A comprehensive study of all those factors affecting enrolment, retention and achievement of school children in these four districts was necessary . The Baseline Assessment Study was, therefore , organized to generate the required data base by collecting relevant information about various variables.

Areawise , Categorywise and Genderwise Literacy distribution of population in the four districts is presented in the following Tables. Dhule district has a larger population in urban area as compared to Beed, Gadchiroli and Jalana districts. Gadchiroli has the lowest percentage of urban population (8.71%) as per the 1991 Census (Table 1.1). Table 1.0 gives additional information.

Table 1.1 : Percentage Distribution of Rural and Urban Population According to 1991 Census

District	Rural	Urban
Beed	82.03	17.97
Dhule	79.47	20.53
Gadchiroli	91.29	08.71
Jalana	83.08	16.92

Table 1.0 : Area, Sex Ratio, Population, Literacy Rates, Schools, Enrolment, and Teachers in Beed, Dhule, Gadchiroli & Jalana Districts At a Glance

		Districts			
		Beed	Dhule	Gadchiroli	Jalana
Area (Sq. Km.)		10693	13150	14412	7718
Density		170	193	55	177
Sex ratio per 1000 Male Pop.		947	959	976	958
Urban to Total Population Ratio		17.9	20.5	8.7	16.9
Population (Lakhs)	Male	9.37	12.95	3.98	6.97
	Female	8.85	12.41	3.89	6.68
	Total	18.22	25.36	7.87	13.64
Literacy rates	Male	66.3	63.1	56.6	64.4
	Female	32.3	38.8	28.9	27.3
	Total	49.8	51.2	42.9	46.2
Primary	Schools	1751	2359	1248	1191
	Enrolment	283658	322127	111121	210850
Secondary	Schools	305	293	111	136
	Enrolment	103190	101390	30331	50377
Hr. Secondary	Schools	51	113	54	25
	Enrolment	43495	130291	12586	28155
Teachers	Primary Total	6887	9064	3764	4073
	Male	5410	6159	3047	3284
	Female	1477	2905	717	789
	Secondary	3499	3598	1184	1525
	Male	3059	2977	971	1281
	Female	440	621	213	244
	Hr. Secondary	1310	3751	1256	641
	Male	1091	3206	1077	423
	Female	219	545	179	118
Trained Teachers	Primary (%)	86.8	96.1	65.3	90
	Secondary (%)	92.72	98.75	83.90	94.51

Source : Education At A Glance (1994-95)Directorate of Education , Maharashtra State , September, 1996.

Dhule district has the highest population density (Density = 194/ sq. km) followed by Jalana (Density = 177 /sq. km) , Beed (Density = 170 / sq. km) and Gadchiroli (Density = 55 /sq. km) . Population density figures for all the four districts are lower than the population density of the state (Density = 256 / sq. km).

Table 1.2 : Percentage Distribution of SC and ST Population According to 1991 Census

District	SC	ST
Beed	13.45	01.15
Dhule	05.28	40.85
Gadchiroli	12.85	38.75
Jalana	12.90	02.05

About 40 % of the SC and ST population in Dhule (40.85 %) and Gadchiroli (38.75 %) districts belonged to ST category, while percentage of ST population in Beed and Jalana district is very low (1 - 2 percent). The percentage of SC population in Dhule (5.28 %) is the lowest as compared to other districts (Table 1.2) . It clearly indicates that Dhule and Gadchiroli districts have a sizable percentage of tribal population.

Table 1.3 : Rate of Literacy According to 1991 Census

District	Rural		Urban		Total
	Male	Female	Male	Female	
Beed	49.92	21.75	67.82	46.65	40.03
Dhule	52.28	29.99	71.11	54.62	51.02
Gadchiroli	44.42	21.27	70.92	50.32	35.40
Jalana	48.72	17.57	63.40	43.70	36.89

Literacy rate in Gadchiroli district is the lowest (35.40), while Dhule district has the highest literacy rate (51.02 %) as compared to Beed (40.03%) and Jalana (36.89 %) districts (Table 1.3) .

Rural female literacy rate is very low - ranging from 17.57 to 29.99 percent in - all the district , when compared with male literacy rate in Beed (49.92 %) ,Dhule (52.28 %), Gadchiroli (44.42 %) and Jalana (48.72 %) districts. It is the lowest in Jalana (17.57 %) district. Literacy rate in the urban areas of all the four districts is quite high. It is greater than the literacy rate of rural men and women both.

Objectives of Baseline Assessment Study (BAS)

General :

a. To Provide data on various variables and their effects on learners' achievement which would be useful for educational managers , administrators, planners and researchers.

b. To carry out the first phase of Assessment of Learning Achievement (ALA) of Class II and Class IV Children in Beed, Dhule, Gadchiroli and Jalana districts of Maharashtra State brought under DPEP phase II.

Specific :

1. To Assess the achievement level of students (nearing the completion of primary school cycle i.e. Class IV/V) in Language and Mathematics .
2. To Study the effect of attendance , repetition rate , level of literacy and numeracy, availability of teaching material and physical facilities, teacher effectiveness and potential support for study at home on learner achievement .
3. To identify the factors that explain the differences in the levels of learner achievement.
4. To Estimate levels of learning of simple literacy and numeracy skills achieved at the end of Class I and Class III.
   To examine whether there are Genderwise, Areawise, and Categorywise (Castewise) differences in the achievement levels of Class I Students.
5. To use Class I result as an explanatory variable in the analysis of Class IV results.
6. To estimate basic literacy and numeracy skills of school dropout children .

Variables Studied

The main focus of the study was to assess Learning Achievement of children at the primary school level. It was a multipurpose survey . The data provided a very useful information on a number of variables such as enrolment, attendance, dropouts, school facilities, teacher characteristics, school organisation, availability of teaching - learning material and aids in schools, students, teacher's and head teacher's characteristics , teaching activities and processes.

The data were subjected to statistical analysis in order to study gender, area (rural - urban) and categories (SC, ST , OBC & Others) accounting for any significant differences in the achievement level of Class IV, Class II students and dropouts.

Organization of the Report

The map of Maharashtra describing the location of DPEP Phase I and Phase II districts is given in the beginning of the report (Figure 1). It is followed by the map of Beed (Figure 2) , Dhule (Figure 3) , Gadchiroli (Figure 4) and Jalana (Figure 5) district illustrating the location of sampled blocks and schools in respective districts.

This report is organised in ten chapters. The first chapter introduces the study, its background, need , and objectives, whereas following chapters deal with Organization of the Study (Chapter 2), Organisation of Field Work(Chapter 3) , Profile of Schools (Chapter 4), The Teacher (Chapter 5), The Dropouts (Chapter 6) , Achievement of Class II students (Chapter 7), Students' Characteristics (Chapter 8), Achievement of Class IV students (Chapter 9) and Implications of the Study (Chapter 10).

A detailed description of the research design , instruments used , data collection procedure, data scrutiny & management of the study , major findings arising out of the research pertaining to students , their achievement , dropouts, teachers and the school participation.

The data presented in various tables is supported by Figures (Graphs) to illustrate data with a view to facilitating the reader's understanding of the data in the respective tables. Figures and corresponding Tables bear the same numbers which make the search easier. For example , Table 4.13 has a corresponding Figure 4.13 . These findings are based on both qualitative and quantitative data and observations of the field and supervisory staff. The implications of the study and suggestions for suitable intervention strategies to resolve the problems are highlighted in the findings.

□

CHAPTER 2

ORGANISATION OF THE STUDY

Introduction

Information based on a number of variables was to be collected with the help of instruments and tools developed. The information collected was to be processed through a computer , classified and tabulated .

The information regarding total number of schools was procured from the respective District Education Officers for sampling purposes. Census records of 1991 at district headquarters , class registers and staff registers were the sources used for collecting information.

Districtwise distribution of sampling unit is given in Table 2.1 . Genderwise and Areawise distribution of the sample is presented in Table 2.2 and Table 2.3 respectively.

Table 2.4 describes blockwise distribution of total sample drawn from the four districts. Learning Achievement Tests were used to assess the achievement level of Class IV students in Language and Mathematics.

Class II students were assessed for Literacy and Numeracy skills. Dropouts were also asked to respond to a simple test in Literacy and Numeracy. The structure of those tests is presented in Table 2.5, Table 2.6, Table 2.7 , Table 2.8 and Table 2.9.

The sample was drawn out of the total number of blocks and urban areas in each district. Districtwise break-up of total blocks , sampled blocks (Rural & Urban areas) and the percentage of sampled schools to the total number of schools in each of the districts is given in Table 2.1.

In all, 153 schools from 9 rural blocks and 27 schools from 10 urban areas in the four districts were selected for the study.

Districtwise and Genderwise distribution of students and teachers population in the total sample is given in Table (2.2). It gives an overall picture of male and female population of teachers and students- Class IV , Class II and Dropouts in the total sample. Female population in each of the above category is small.

Female teachers in Gadchiroli district are the least (only 16 out of 444) while Dhule district has the largest number of female teachers (58 out of 444) in the sample. Number of dropouts in case of girls is greater than boys . The number of girls dropout in Beed district is the lowest (6).

Areawise distribution of students and teachers in each district is given in Table 2.3. The field investigators and supervisors maintained the record systematically during the visits to respective schools.

Table 2.1 : Districtwise Distribution of Sampling Unit

District	Beed		Dhule		Gadchiroli		Jalana		Total	
	Block	Urban Areas	Block	Urban Areas	Block	Urban Areas	Block	Urban Areas	Block	Urban Areas
Block/ Urban Sampled(Block/ Urban Areas	7	7	10	8	8	1	5	4	30	20
	2	3	3	3	2	1	2	3	9	10
Total Number of Schools in	I-IV I-VII	1174 1641	I-IV I-VII	895 121	I-IV I-VII	901 289	I-IV I-VII	672 450	I-IV I-VII	4642 2501
the District	2815		2016		1190		1122		7143	
Sampled Schools	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
% Sampled Schools to the Number of Schools in the District	38	7	36	9	41	4	38	7	153	27
	1.37	0.25	1.83	0.46	3.58	0.35	3.53	0.65	10.39	1.17

Table 2.2 : Districtwise and Genderwise Distribution of Total Sample (Students & Teachers)

District	Class IV		Class II		Drop-Out		Teachers	
	M	F	M	F	M	F	M	F
Beed	395	313	391	270	33	6	91	31
Dhule	438	374	381	366	73	79	86	58
Gadchiroli	246	233	238	219	12	11	71	16
Jalana	441	215	401	305	30	37	72	19
Total	1520	1135	1411	1168	148	133	320	124
Grand Total	2655		2579		281		444	

The total sample size for all the four districts comprised 180 schools , 2655 Class IV students, 2579 Class II students, 281 Dropouts and 444 teachers (Head teachers included). Districtwise and genderwise break-up of the sample and further details are given in Table 2.2 and Table 2.4.

Table 2.3 : Districtwise and Areawise Distribution of Total Sample (Students & Teachers)

District	Class IV		Class II		Drop-Out		Teachers		No. of Schools	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Beed	534	174	544	125	37	2	92	30	38	7
Dhule	574	238	581	166	126	26	102	42	36	9
Gadchiroli	365	114	379	78	18	5	67	20	41	4
Jalana	463	193	566	140	55	12	61	30	38	7
Total	1996	719	2070	509	236	45	322	122	153	27
Grand Total	2655		2579		281		444		180	

Table 2.3 revealed that a large number of students belong ed to rural schools . Dhule district had the largest, rural and urban both , student population among the four districts. Gadchiroli had the lowest.

The number of dropouts interviewed was also found to be the largest , rural and urban both, again in Dhule district and it was the least in Gadchiroli district.

It was surprising to observe that only 2 dropouts from urban areas of Beed district were interviewed . This needs further study.

Table 2.4 : Blockwise Distribution of Total Sample

Districts	Blocks	Schools	Class IV	Class II	Dropouts	Teachers		
						HT	T	HT+T
Beed	1 Kej (R)	22	299	324	19	22	26	48
	2 Ambajogai (R)	16	235	220	18	16	26	42
	3 Ashti (U)	1	30	20	00	1	4	5
	4 Ambajogai (U)	3	66	46	2	3	9	12
	5 Majalgaon (U)	3	78	59	00	3	12	15
	Total	45	708	669	39	45	77	122
Dhule	1 Shirpur (R)	13	185	202	47	13	22	35
	2 Nandurbar (R)	14	239	222	49	14	27	41
	3 Talode (T)	9	149	157	29	9	17	26
	4 Dondaicha (U)	3	76	60	15	3	12	15
	5 Navapur (U)	3	73	46	7	3	9	12
	6 Talode (U)	3	90	60	5	3	12	15
	Total	45	812	747	152	45	99	144
Gadchiroli	1 Dhanora (R)	31	195	244	9	31	12	43
	2 Gadchiroli (R)	10	168	135	9	10	15	25
	3 Desaiganj (U)	4	116	78	5	4	15	19
	Total	45	479	457	23	45	42	87
Jalana	1 Jalana (R)	19	215	272	25	19	11	30
	2 Ambad (R)	19	247	294	29	19	8	27
	3 Partur (U)	3	74	60	12	3	11	14
	4 Ambad (U)	2	60	40	00	2	8	10
	5 Bhokardhan (U)	2	60	40	1	2	8	10
	Total	45	656	706	67	45	46	91
Grand Total	9 (R)	153	1936	2070	234	153	164	317
	10 (U)	27	719	509	47	27	100	127
Grand Grand Total	19	180	2655	2579	281	180	264	444

Table 2.4 describes the rural blocks and urban areas sampled , number of schools selected from each of those, number of sampled Class IV students, Class II students , Sampled dropouts , Teachers and Headteachers.

The table revealed that field investigtors in Dhule district could contact the highest number of dropouts (152 out of 281) followed by Jalana (67 out of 281) , Beed (39 out of 281) and Gadchiroli (23 out of 281). Dhule district had the largest sample size , while Gadchiroli had the smallest sample size among the four districts. The Language Achievement Test (LAT) in Marathi was the Standardised Achievement Test comprising 44 Items administered in two parts:

a. Word Meaning (WM) - 20 Items and
b. Reading Comprehension (RC) - 24 Items .

A detailed description of the Test is given in Table 2.5.

Table 2.5 : Profile of Language Achievement Test
Class IV

Content Area	Description	No. of Items
Vocabulary Control	Synonyms	19
	Antonyms	1
	Sub-total	20
Comprehension of Idea	Meaning of Words/ Phrases/ Sentences	00
	Factual Details	12
	Inferences	11
	Central Idea/ Title	1
	Sub-Total	24
Total		44

The Mathematics Achievement Test (MAT) was the Standardised Achievemer Test comprising 40 Items administered to the Class IV students sampled from the fou districts brought under DPEP Phase II. A detailed description of the MAT is given in Table 2.6.

Table 2.6 : Profile of Mathematics Achievement Test
Class IV

Content Area	No. of Items
Whole Number and Numerals	6
Addition , Subtraction, Multiplication and Division in Whole Numbers	13
Simple Problems of Daily Life Relating to the Units of Money , Length, Mass , Capacity , Area and Time	17
Fraction , Decimal and Percentage	00
Geometry	4
Total	40

A test in language achievement was prepared to test Literacy and Numeracy skills of the sampled Class II students (2579). It was the Standardised Achievement Test in two parts :

a. simple Literacy and b. Numeracy .

Table 2.7 : Profile of Literacy Test
Class II

	Content Area	No. of Items
Letter Reading	Simple Letter	10
	Sanyukt (Complex) Letters	0
	Total	10
Word Reading	Words Beginning and Ending with Letter Without 'matra'	6
	Words Beginning with Letter without 'matra and Ending With Letter with 'matra'	0
	Words Beginning with Letter 'matra' and Ending Without 'matra'	4
	Words Beginning with Letter 'matra' and Ending with Letter With 'matra'	0
	Total	10

In the simple literacy part of the test children were asked to recognise ten alphabets in Marathi language and read ten simple words. Details about the Literacy test are presented in Table 2.7.

Table 2.8 : Profile of Numeracy Test
Class II

Area	Contents	Items
A. Recognition of Small and Large Numbers	Pairs of One Digit Numbers	1
	Pairs of Two Digit Numbers	4
	Pairs of Two Digit and One Digit Numbers	1
B. Addition	Addition of Two One Digit Numbers	2
	Addition of One Digit Numbers with Zero	1
	Addition of Zero with One Digit Numbers	1
C. Subtraction	Involving Two One Digit Numbers	2
	Involving One Digit Numbers	2
Total		14

A simple Numeracy Test comprising 14 items based on Number Recognition , Addition and Subtraction was administered to 2579 Class II children from Beed , Dhule, Gadchiroli and Jalana district. A detailed description of Test items is given in Table 2.8.

Table 2.9 : Profile of Literacy and Numeracy Dropouts

Area	Content	Items
Literacy	Factual	6
	Inferences	2
	Total	8
Numeracy	ADDITION	
	1. Involving Single Digit Numbers	1
	2. Involving Single and Double Digits	0
	3. Involving Two Double Digits Numbers	1
	SUBTRACTION	
	1. Involving One Digit Numbers	1
	2. Involving Two Digit Numbers	1
	MULTIPLICATION	
	1. Involving Two Single Digit Numbers	1
	2. Involving Double Digit and Single Digit Numbers	1
	Total	6

A simple Literacy and Numeracy Test comprising eight items each in Literacy and Numeracy was administered to the 281 sampled dropouts. Items in the Literacy Test were about giving factual information and drawing appropriate conclusions. Items in Numeracy Test were related to simple Addition , Subtraction and Multiplication of numbers. Details about test items are found in Table 2.9

CHAPTER 3

ORGANIZATION OF FIELD WORK

It was decided to collect information regarding various variables and aspects such as physical facilities in schools, student characteristics, learning achievement, teachers, dropouts, etc. Therefore a large number of people were involved in conducting the field survey. Organisation of the field work in terms of recruitment and training of the field supervisors, field investigators and also the methodology of data collection and scrutiny of the data are dealt with in this chapter.

The chapter provides for only one table titled **Table 3.1 : Sample for Training Situation and Actual Situation** which is compiled by collecting information from field investigators. The chapter is organised in the following sections :

1. Coverage
2. Population
3. Sampling Design
4. Research Tools and Techniques
5. Field Work
6. Field Deployment Plan
7. Administration of Tests
8. Data Scrutiny
9. Data Management

1. Coverage

Beed , Dhule , Gadchiroli and Jalana were the four districts from Maharashtra state selected for the Baseline Assessment Study under DPEP Phase II. The districts were selected on the basis of backwardness, low level of literacy, enrolment in primary schools and participation of girls in the formal school system .

It was decided to select 45 schools , with 30 Class IV students, 20 Class II, 5 Dropouts , Head Teacher and 5 Teachers (including a lady Teacher) from each district. Therefore , about 5400 Class IV students, 3600 Class II students, 900 Dropouts, 180 Head teachers and 900 Teachers were envisaged to be included in the study from the four districts (Figure 6) . 1.37, 1.83, 3.58, and 3.53 percent Rural and 0.25 , 0.45, 0.35 and 0.65 Urban schools comprised the sampled school population in Beed, Dhule, Gadchiroli and Jalana respectively (Table 2.1 on page 24).

The districts under DPEP Phase I & Phase II are shown in the Map of Maharashtra (Figure 1). District Maps of Beed , Dhule, Gadchiroli and Jalana showing the selected Blocks, Urban Areas and sampled Schools are given to facilitate understanding of the coverage (Figure 2, Figure 3, Figure 4 & Figure 5).

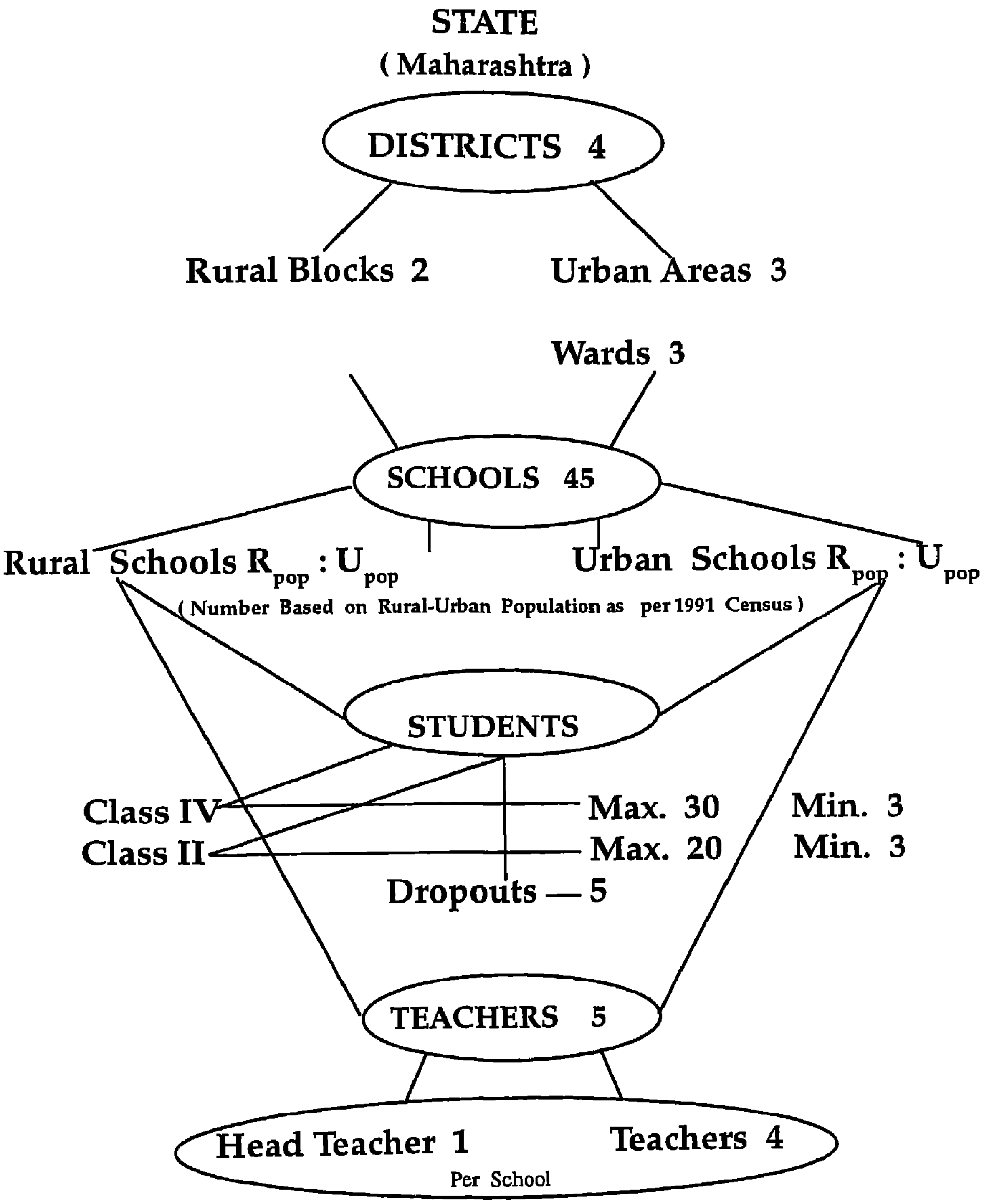
2. Population

All Government and Private aided primary schools (Class I to Class IV) in each

Figure 6 : SAMPLING FRAMEWORK

(For Each District)

Baseline Assessment Study DPEP Phase II



a. Districtwise selections be made randomly , wherever applicable

b. Include a tribal block, if it exists and not selected

c. Include a lady teacher , if not selected

d. Prepare a list of total 10 Replacement schools

district were taken as the population. All primary schools using Marathi as the medium of instruction were considered as the total population. Schools other than Marathi medium were not included in this study.

3. Sampling Design

It was a multi-purpose study , with a focus on Learning Achievement Level of students in Language and Mathematics at Primary School Level, dealing with a large number of variables. The school was taken as the basic unit of sampling. A multi-stage sampling design was adopted for selecting rural blocks and urban areas and down to dropouts, etc. A multi-stage stratified random sampling technique (Figure) on page 31) was used . Stage-wise sampling procedure completed is described below :

Stage I : a. Selection of Blocks

Two blocks from each district were ramdomly selected from the list of blocks (arranged in alphabetical order) in the district. Selection of blocks was based on following criteria :

1.	Districts having 1-10 blocks	Two to be selected
2.	Districts having 11-20 blocks	Three to be selected
3.	Districts having 21-30 blocks	Four to be selected
4.	Include a tribal block , if it does not appear in the list of randomly selected blocks.	

b. Selection of Urban Areas

Selection of urban areas was based on following criteria :

a .	Districts having 1-10 Urban areas	Two to be selected
b .	Districts having 11-20 Urban areas	Three to be selected.

Stage II : Selection of Schools :

Population distribution in rural and urban areas as per the 1991 census was taken as the base of distribution of sampled schools over urban and rural areas. Proportion of Rural - Urban population was found to be 5:1 in Beed district, 4 : 1 in Dhule and 11 : 2 in Jalana district. Accordingly schools were , proportionately distributed over rural and urban population. Distribution of Sampled Schools is given in Table 2 .1 on page 25.

Stage III : a. Selection of Rural Blocks

A total number of blocks in all the four districts were found to be in 1 -10 range. There were no tribal blocks in Beed and Jalana districts. A list of blocks (arranged in alphabetical order) in each district was prepared and as per the given criteria 2 blocks were randomly selected from each district .

There were four tribal blocks in Dhule district . It was , therefore , necessary to include a tribal block in the sample . A separate list of tribal blocks in Dhule district was again prepared and one out of the four blocks (Talode) was randomly selected

as an additional block over and above the requisite sampled number (2).

Stage III : b. Selection of Urban Areas and Wards

i. Selection of Urban Areas

While selecting urban areas district headquarter was excluded for minimising bias in the data . All the urban areas in each district were listed and arranged in ascending order of their population . Random number table was used for selecting sampled urban areas .

ii. Selection of Wards

A list of all wards from the sampled urban area was procured and following criteria for selecting the wards was used :

a. Select maximum 3 wards from each sampled Urban Area.
b. Select all Wards if total number of wards is 3 or less than 3.
c. If the number of wards is more than 3, select 3 randomly.

Districtwise sampled Rural blocks , Urban areas and number of schools is given in Table 2. 1 on page 25.

Stage IV : Selection of Schools

Only Government and Government aided schools were considered for selection in rural as well as urban areas .

a. Selection of Rural Schools

The number of schools sampled from each block were directly proportional to total number of schools in that block. Sampled schools were given 01, 02, 03 ..., 45 as the code numbers. A replacement list of 10 schools was prepared in the same manner with Code Nos. 46, 47, ... and 55 . It enabled the field investigators to opt for another school in the event of dropping sampled school for unforeseen reasons.

b. Selection of Urban Schools

The total number of schools from the sampled urban areas was drawn proportionately on the basis of number of wards . A list of schools for the selected wards from each urban area was prepared and it was arranged according to the order of selection of the wards and then the requisite number of schools was randomly selected .

Stage V : Selection of Students

a. Selection of Class IV Students

Following criteria was used for selection of class IV students:

i. Select 30 as the maximum number of students from one school.

ii. Select one division / section randomly in case of more than one section .
iii. Club two sections in case of two sections with a strength of 25 students in each section , and select 30 students with a random start.
iv. Select all , if the number of students is less than 30.
v. Arrange boys and girls alternatively , if the number is between 31 to 59 and select 30 by a random start.
vi. If number exceeds 59 , refer to the class register and select 30 by a random start.

b. Selection of Class II Students

Following criteria was used for selection of class II students:

i. Select 20 as the maximum number of students from one school.
ii. Select one division / section randomly in case of more than one section .
iii. Club two sections in case of two sections with a strength of students is less than 20 in one section , and select 20 students with a random start.
iv. Select all , if the number of students is less than 20.
v. Arrange boys and girls alternatively , if the number is between 21 to 39 and select 30 by a random start.
vi. If number exceeds 39 , refer to the class register and select 20 by a random start.

c. Selection of Dropouts

i. Select preferably recent dropouts who have been absent from a period of minimum three months and maximum one year before the month of Observation
ii. Follow the order of preference from Class IV , Class III, Class II and Class I
iii. List all the dropouts
iv. Check those who come from the village in which the school is located
v. Select 5 dropouts using simple random sampling , if there are more than 8 such dropouts
vi. Consider the remaining dropouts for replacement purposes

Stage VI : Selection of Teachers

i. Select a maximum of 5 Teachers
ii. Include the Head Teacher in the sample
iii. Include a teacher who taught Class IV in the previous academic year
iv. Include a teacher who taught Class II in the previous academic year

v. Select two more teachers randomly from the remaining teachers, if any
vi. Drop the last teacher in the list and include a regular lady teacher in the sample

In short, the total sample size for all the four districts comprised 180 schools, 2655 class IV students, 2579 class II students, 444 teachers (including head teachers) and 281 dropouts. Further details are given in Table 2.4 on page 26 .This matches with the envisaged targeted sample to be covered, as per the research design.

Table 3.1 : Sample for Training Situation and Actual Situation

Sr. No.	Description		Envisaged N	Training N	Actual N
1	Student Schedule (Present)	(SP)	5400	2655	2655
2	Language Test - Class IV	(L)	5400	2655	2655
3	Mathematics Test - Class IV	(M)	5400	2655	2655
4	Achievement Test - Class II	(AT)	3600	180	180
5	Student Schedule (Dropout)	(SD)	900	281	281
6	School Record Schedule	(SR)	180	180	180
7	Teacher's Schedule	(T)	900	265	265
8	Head Teacher's Schedule	(HT)	180	180	180
9	Field Notes		180	180	180

4. Research Tools and Techniques

Following three types of tools were used for the study:

A . Learning Achievement Tests
B. Schedules
C. Field Notes

A . Learning Achievement Tests

Separate tests, described in the following paragraphs were used for assessing learning achievement of students in Class IV, Class II and Dropouts.

1. **Language Achievement Test (LAT) for Class IV** : The test had two sections viz., a. Word Meaning (WM) comprising 20 items and b. Reading Comprehension (RC) consisting of 24 items . The test was based on competencies expected to be aquired by the end of Class III , and was used to assess the Learning Achievement of Class IV students in Language.

2. **Mathematics Achievement Test (MAT) for Class IV** : The test had 40 items related to number recognition , addition & subtraction, fractions, multiplication, division, weights & measures and geometrical figures. It was based on competencies expected to be achieved by the end of Class III.

3. **Simple Literacy and Numeracy Test for Class II** : The test was based on competencies in Language and Mathematics to be achieved by the end of Class I . Literacy test contained 10 letters of Marathi alphabets and 10 words expected to be read by Class II students. The Numeracy test had 10 items related to recognition of numbers, addition and subtraction.

4. **Literacy and Numeracy Test for Dropouts** : Literacy test had a paragraph containing 5 sentences (5 to 10 words each) and eight questions to test simple comprehension of the paragraph by dropouts. The Numeracy test had 8 test items based on simple addition, subtraction, multiplication and division involving one / two digit numbers.

B. Schedules

Four types of schedules described below were used to collect information related to context and process variables.

1. **Student Present Schedule (SP)** : Sampled Class IV students who were administered LAT and MAT tests were interviewed using this schedule. It had 40 items for collecting information on background variables like pre-schooling, attendance , perceptions of students about their teachers and teaching , availability of learning materials , school related activities at home, nutrition , etc.

2. **Teacher Schedule (TS)** : This schedule had two parts. It contained items for collecting information about teacher's characteristics, qualifications, training and experience, availability of teaching material & teaching aids, teaching activities and supervision . It was used for interviewing teachers and head teachers from sampled schools.

3. **Student Dropout Schedule (SD)** : This schedule was used to collect information about the dropouts . It covered background variables , reasons for leaving the school and the work which they were engaged in at the time of the study.

4. **School Record Schedule (SR)** :This schedule included items for collecting information regarding physical facilities , enrolment, attendance , dropouts, teaching materials , multigrade teaching, school management and school expenditure.

C. Field Notes

A separate set of field notes for each school was compiled by the investigating

teams. It was developed to systematise the procedure for selecting Class IV , Class II students, Teachers and dropouts. Detailed entries regarding listing of students, random start, column of random number used for selecting students and teachers were made in field notes. It also contained qualitative information based on observations of field investigators.

5. Administration of Tests

The objective of the study was to assess learning achievement of Class IV students in Language and Mathematics , Class II students and dropouts for Literacy and Numeracy skills. It was necessary to ensure and maintain the quality of data. Test administration was one of the crucial aspects of data collection process. Field supervisors and investigors were guided to observe strictly the following :

i. the selection of students not to be influenced by the teacher
ii. teachers not to be present at the time of testing the students or inter viewing dropouts
iii. Sufficient time to be given to students to understand the examples in doing the test.
iv. Students do not copy must be ensured

6. Field Work

Supervisors and Field Investigators

It was decided to appoint one State Supervisor for each district to conduct the Baseline Assessment Study in the selected district. He was assisted by a team of three district supervisors and 12- 16 field investigators in the district. District supervisors had a Master's degree along with a degree in teaching.

The field investigators were recruited through an advertisement . They were graduates preferably with a degree in teaching. Thus a total number of 12 district supervisors, and 60 field investigators were deputed / recruited from Beed, Dhule, Gadchiroli and Jalana districts.

Training of Field Investigators

The district level teams of supervisors and field investigators received training for a period of 10 days from 9 th September to 18 th September , 1996 in each district. The training was conducted on the lines of the training conducted for Master trainers at the State level in August , 1996. The emphasis was on a participatory , field oriented and practical approach. Theoretical and practical inputs were given through simulated classroom sessions and field visits.

Training methodology included extensive reading of the material supplied - individually and in groups, discussions in small groups , demonstrations, role play and home assignments. A brief review of the work done was taken at the end of the day and feedback received with a view to planning for the next day.

The training organised for Master Trainers & Field Staff covered following areas:

Content of Training

a. Objectives and scope of the project
b. Research Design , Instruments , tools and techniques
c. Data Collection Plan -Conducting Interviews and Administration of Tests
d. Field Work Details and Deployment Plan
e. Scrutiny of Data
f. Team Work and Field Situations
g. Administrative Procedures
h. Material Management -Issuing and receiving
i. Organisation of Field Training
j. Reporting Requirements

Material

a. Training Manual
b. Field Handbook

Training Methodology

a. Participatory
b. Individual and Small Group Work
c. Role Play Using Field Techniques
d. Practice in Simulated Situation
e. Practice in the Field
f. Sharing Experiences in Large Groups
g. Special Training for Test Administration

The training involved using the field handbook translated in Marathi . The trainees were encouraged to read the field handbook thoroughly and recapitulate what they had understood.

Three days out of ten were planned for putting theory into practice in the field situation. The trainees got exposure to real life situations of what they were expected to do later on as field investigators during the actual data collection. These field experiences were reviewed and thoroughly discussed for rectifying mistakes, if any, and clarifying the doubts and issues arising in actual field situations.

7. Field Deployment Plan

Field work was organised districtwise. A team of three District Supervisors (DS) , 12- 16 Field Investigators (FI's) was led by the State Supervisor (SS) in each district.Thus four teams in four districts started data collection work simultaneously as scheduled on 19 th September, 1996 and it was completed in the third week of October , 1996.

8. Data Scrutiny

Data scrutiny of the data collected was done at three levels :

a. in the field itself by the Field Investigators
b. at the district level by the District Supervisors under the guidance of State Supervisor
c. at the SCERT Headquarters by a scrutiny team.

As the data collection work needed constant attention and supervision, feedback was provided on daily work done by the field investigators.

Procedures applied for data scrutiny at the three levels are briefly described below:

Level I : Field Level

Field Supervisors examined manually filled in schedules by field investigators at the end of the day's work . Mistakes in sampling , omissions, incorrect or incomplete information, if any, were rectified the very next day by revisiting the school. The supervisors ensured all such corrections properly made.

Level II : District Level

District Supervisors exchanged schedules and tests and crosschecked the work done by other teams of the field investigators.

Level III : SCERT Level

Finally, scrutiny of the data was manually done at the SCERT Headquarters before sending it to the computer for data entry and data analysis.

Following points were taken into consideration while scrutinising the data at the SCERT level :

Checking -
a. the number of schedules and test booklets ;
b. the status codes of the schedules;
c. on the method of random selection of schools, students, teachers, dropouts, etc, wherever applicable;
d. on whether the test response sheets and the student schedules matched;
e. all codes entered on response sheets;
f. validity of codes, code range, inter - dependency of variables, etc.
g. totals , accuracy of conversions, and reference periods.

9. Data Management

Data management procedures were devised with great care to ensure the integrity and high quality of the data. Following tasks were involved in data management :

a. Data Entry and Verification
b. Batch Checks
c. Consistency Checks
d. Missing Values Report
e. Storing of the Data

a. Data Entry and Verification

Each student , teacher and school was identified by the respondent code and a unique school identification code which indicated the district, block and school number. The data collected through different schedules and tests were transferred to magnetic disks as soon as the manual scrutiny work was over.The data were then processed by using suitable database software. A care was taken for checks, verification and validation.

b. Batch Checks

The first set of checks on the data received from the field were covered in the Batch Reports. The report is for the batch record comprising all types of schedules. The IDs , matching schedules to schools, tests to students and so on were checked by this report. Batch report was further cross- checked with the control totals.

c. Consistency Checks

A list of intra- schedule and inter schedule consistency checks was drawn up. Inconsistencies were then reconciled by re-checking with the investigator. Necessary corrections were made and the final corrected data were put ready for required outputs.

d. Missing Values Report

This report was prepared to document the extent and nature of non-response in the field survey. It summarised the frequency of each type of non- response and variables on which it was most difficult to obtain correct information.

e. Storing the Data

All data and programme files were backed up on magnetic diskettes.

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CHAPTER 4

PROFILE OF SCHOOLS

This chapter presents information abut availability of physical facilities and teaching materials in the sampled schools in all the four districts. Besides, it also covers information pertaining to enrolment , dropouts, multigrade teaching , etc. The information is spread over a number of 23 tables. The tables are based on the data gathered through a filled in School Record Schedule (SR).

Gender, Area and Castewise Distribution of Participation

Figures about the enrolment of sampled boys and girls from the four districts for the year 1995-96 were collected and tabulated . Genderwise distribution of the sample is given in Table 4.1 . It is clear from the table that the enrolment of girls is less than boys. It is the lowest in Jalana district (34- 40%) and highest in Gadchiroli district (48-50%) . The gender gaps are wider in Beed and Jalana districts. Efforts are required to be made to reduce the gender gap in case of enrolment of girls in all the four districts. .

Table 4.1 : Total Enrolment and Percentage of Children in Schools (Genderwise)

		Boys		Girls		Total
Districts	Class	N	Percent	N	Percent	N
Beed	I	1120	61	725	39	1845
	II	951	61	603	39	1554
	III	912	62	567	38	1479
	IV	851	61	540	39	1391
	Total	3834	61	2435	39	6269
Dhule	I	1128	54	971	46	2099
	II	949	54	813	46	1762
	III	940	54	787	46	1727
	IV	790	52	738	48	1528
	Total	3807	53	3309	47	7116
Gadchiroli	I	444	51	423	49	867
	II	386	52	352	48	738
	III	458	50	454	50	912
	IV	370	50	368	50	738
	Total	1658	51	1597	49	3255
Jalana	I	1133	60	749	40	1882
	II	903	61	571	39	1474
	III	949	64	534	36	1483
	IV	761	66	400	34	1161
	Total	3746	62	2254	38	6000

Areawise distribution of the sampled population is presented in Table 4.2. It reveals that there are more rural children in schools than their urban counter parts in all the four districts.

A progressive decline is seen in rural enrolment of students from Class I to Class IV. This is not the case with the urban sample. It is seen progressively increasing. It indicates the disinterestedness of rural parents and more awareness about the importance of education in urban population . Interventions to create awareness in rural population in all the four districts are needed.

Table 4.2 : Total Enrolment and Percentage of Children in Schools (Areawise)

Districts	Class	Rural N	Rural Percent	Urban N	Urban Percent	Total N
Beed	I	1253	68	592	32	1845
	II	1083	70	471	30	1554
	III	962	65	517	35	1479
	IV	891	64	500	36	1391
	Total	4189	67	2080	33	6269
Dhule	I	1376	66	723	34	2099
	II	1083	61	679	39	1762
	III	1043	60	684	40	1727
	IV	922	60	606	40	1528
	Total	4424	62	2692	38	7116
Gadchiroli	I	615	71	252	29	867
	II	506	69	232	31	738
	III	676	74	236	26	912
	IV	504	68	234	32	738
	Total	2301	71	954	29	3255
Jalana	I	1145	61	737	39	1882
	II	763	52	711	48	1474
	III	667	45	816	55	1483
	IV	461	40	700	60	1161
	Total	3036	51	2964	49	6000

Castewise enrolment distribution of the students is given in Table 4.3. Castewise enrolment percentage is presented in Table 4.4. The percentage of the students under Others category is very high in Beed and Jalana districts and it is smaller than ST and OBC categories in Dhule and Gadchiroli - having tribal population.

Suitable instructional strategies need to be introduced to teach the Tribal children having a variety of tribal dialects.

Table 4.3 : Total Enrolment of Children in Schools (Categorywise)

Districts	Class	SC	ST	OBC	Others	Total
Beed	I	383	38	376	1169	1966
	II	260	27	269	990	1554
	III	262	19	284	914	1479
	IV	199	26	212	954	1391
	Total	1104	110	1141	4035	6390
Dhule	I	168	1017	415	499	2099
	II	139	715	359	549	1762
	III	156	645	353	573	1727
	IV	141	504	352	531	1528
	Total	604	2881	1479	2152	7116
Gadchiroli	I	113	288	396	70	867
	II	115	236	315	72	738
	III	119	306	415	72	912
	IV	100	243	326	69	738
	Total	447	1073	1452	283	3255
Jalana	I	326	61	144	1351	1882
	II	245	59	148	1022	1474
	III	261	61	148	1013	1483
	IV	184	29	151	797	1161
	Total	1016	210	591	4183	6000

Table 4.4 : Enrolment Percentage of Children in Schools (Categorywise)

Districts	Class	SC	ST	OBC	Others
Beed	I	19.48	01.93	19.13	59.46
	II	16.73	01.74	17.31	64.22
	III	17.71	01.28	19.20	61.80
	IV	14.31	01.87	15.24	68.58
	Total	17.06	01.71	17.72	63.52
Dhule	I	08.00	48.45	19.77	23.77
	II	07.89	40.58	20.37	31.16
	III	09.03	37.35	20.44	33.18
	IV	09.23	32.98	23.04	34.75
	Total	08.54	39.84	20.91	30.72
Gadchiroli	I	13.03	33.22	45.67	08.07
	II	15.58	31.98	42.68	09.76
	III	13.05	33.55	45.50	07.89
	IV	13.55	32.93	44.17	09.35
	Totall	3.80	32.92	44.51	08.77
Jalana	I	17.32	03.24	07.65	71.79
	II	16.62	04.00	10.04	69.34
	III	17.60	04.11	09.98	68.31
	IV	15.85	02.50	13.01	68.65
	Total	16.85	03.46	10.17	69.52

School and Class Size

Analysis of enrolment data shows a progressive decline in the average class size from 22 in Class I to 18 in Class IV in Beed district, from 32 in Class I to 25 in Class IV in Dhule district, from 29 in Class I to 19 in Class IV in Jalana district. The decline is the highest for Jalana district. Decline in the average class size reflects on retention rate of the students in Beed, Dhule and Jalana districts. But it is rather surprising that Gadchiroli shows a reverse trend. The average class size in Gadchiroli is not declining, like other districts, it is progressively rising. Steps are to be taken to arrest dropout rate.

Table 4.5 : Average Class Size

Class	Districts				
	Beed	Dhule	Gadchiroli	Jalana	Total
I	22	32	17	29	25
II	20	28	15	25	22
III	18	28	18	25	22
IV	18	25	25	19	19
Total	19	28	16	25	22

Dropout Rates

Genderwise, Areawise and Categorywise dropout rates were calculated and tabulated in Table 4.6, Table 4.7, and Table 4.8 respectively. Table 4.6 shows that there is a visible difference between boys and girls dropouts. It is higher in case of girls. It is the highest in Dhule district and least in Beed district. It is considerably high in Jalana district. Interventions in this regard are required in Dhule and Jalana districts.

Table 4.6 Dropout Rate (Genderwise)

District	Boys	Girls	Total
Beed	0.55	0.15	0.70
Dhule	1.90	2.37	4.28
Gadchiroli	0.73	0.70	1.43
Jalana	0.89	1.95	2.84

Urban students have lower dropout rates as compared to rural students. (Table 4.7). It is the highest in tribal districts - Dhule (3.28%) followed by Gadchiroli (1.10). Inter district variations are also seen.

Table 4.7 Dropout Rate (Areawise)

District	Rural	Urban	Total
Beed	0.61	0.05	0.66
Dhule	3.28	0.78	4.07
Gadchiroli	1.10	0.32	1.41
Jalana	1.62	0.63	2.26

When the categorywise dropout rates were compared the Scheduled Tribes had the highest dropout rate followed by OBC. The SC had the lowest. Dhule being a tribal district had the highest dropout rate for ST students. Group specific and area specific planning and intervention strategies are needed in all the four districts.

Table 4.8 Dropout Rate (Categorywise)

District	SC	ST	OBC	Others	Total
Beed	0.08	0.08	0.02	0.21	0.39
Dhule	0.13	1.56	0.25	0.18	2.12
Gadchiroli	0.06	0.34	0.31	0.00	0.72
Jalana	0.23	0.02	0.04	0.98	1.27

Information about the number of school working days was collected. Table 4.9 indicates that most of the schools had working days within 201 -225 range. But in Gadchiroli district about 91% schools work for 151- 250 days. About 4% schools in Gadchiroli district work for 151 -175 days only. About 2% schools in Dhule district were found working for more than 250 days. But why? This requires further probe to plan area specific programmes in Tribal districts.

Table 4.9 : Percentage of Schools According to Number of Working Days

	Districts			
Working Days	Beed	Dhule	Gadchiroli	Jalana
100- 125	0.00	0.00	0.00	0.00
126-150	0.00	0.00	0.00	0.00
151-175	0.00	0.00	4.44	0.00
176-200	0.00	0.00	24.44	0.00
201-225	0.00	2.22	66.67	0.00
226-250	100	95.56	4.44	100
Above 250	0.00	2.22	0.00	0.00

School Facilities

School building is one of the most important requirements in education. Table 4.10 indicates that most of the schools in all the four districts have either their own buildings or rent free buildings to hold classes. About 95% Schools in Dhule district have the highest number of own buildings .

Percentage of schools having own buillding in Gadchiroli is the lowest (73.33%) followed by schools in Beed district (77.78%). However, most of the buildings are reported by the field investigators and supervisors to be poorly maintained. School Building Construction plans need to be developed on priority basis for schools in Beed and Gadchiroli districts. Regular maintenance and up-keep plans and mechanisms are also required to be developed.

Table 4.10 : Percentage of Schools on the Basis of Building Ownership

Status	Districts			
	Beed	Dhule	Gadchiroli	Jalana
Own Building	77.78	95.56	73.33	91.11
Rent Free Building	22.22	04.44	26.67	08.89

Almost all schools in all the four districts are within 1 - 5 km of the nearest Pre-school facility. About 30% sampled schools reported that there existed another primary school within 1 - 2 km (Table 4.11). 21% schools in Beed, 16% in Dhule , Gadchiroli and Jalana district have upper primary schools within 1 - 5 km.

A fairly large percentage of sampled schools in Beed (38%), Dhule (28%), Gadchiroli (28%) and Jalana (32%) have highschools within 1 - 5 km . About 25 % sampled schools are away from their Head Quarters by more than 21 km. Provision for Class V to VIII needs to be met at a walking distance .

Table 4.11 : Proximity to Other Schools

Name of the Place	Distance From the School (Km)	Districts			
		Beed	Dhule	Gadchiroli	Jalana
I. Nearest Anganwadi/Balwadi / Pre-School	Negligible	3	18	5	8
	1-5	42	27	39	37
	6 & above	0	0	1	0
II. Nearest Primary School	Negligible	0	6	1	0
	1-2	28	29	30	32
	3 & above	17	10	14	13
III. Nearest U P Schools	Negligible	0	8	1	1
	1-2	21	16	16	16
	3-4	11	9	13	17
	4 & above	8	7	14	8
IV. Nearest Highschool/ Hr Sec. School	Negligible	0	7	1	1
	1-5	38	28	28	32
	6 & above	7	10	16	12
V. Block Head Quarters	1-10	12	13	9	7
	11-20	7	13	12	10
	21 & above	25	16	24	27
VI. Nearest Traditional School (Madarsa)	Negligible	12	40	23	21
	6-10	7	0	3	5
	10 & above	7	0	13	11

Table 4.12 indicated that almost all sampled schools have at least one classroom. No schools in Gadchiroli and Jalana district have reported that they do not have any classroom. Majority schools (More than 60%) have 1 - 3 classrooms . About 2% schools in Beed and Dhule districts do not have even one classroom. District plans must take care of these basic requirements on war footing.

Table 4.12 : Percentage of Schools According to Number of Classrooms

Number of Classrooms	Districts Beed	Dhule	Gadchiroli	Jalana
Zero	2.22	2.22	0.00	0.00
One	15.56	17.78	71.11	40.00
Two	28.89	24.44	15.56	42.22
Three	17.78	11.11	6.67	4.44
Four	8.89	8.89	2.22	4.44
Five	4.44	6.67	0.00	0.00
More than Five	22.22	28.89	4.44	8.89

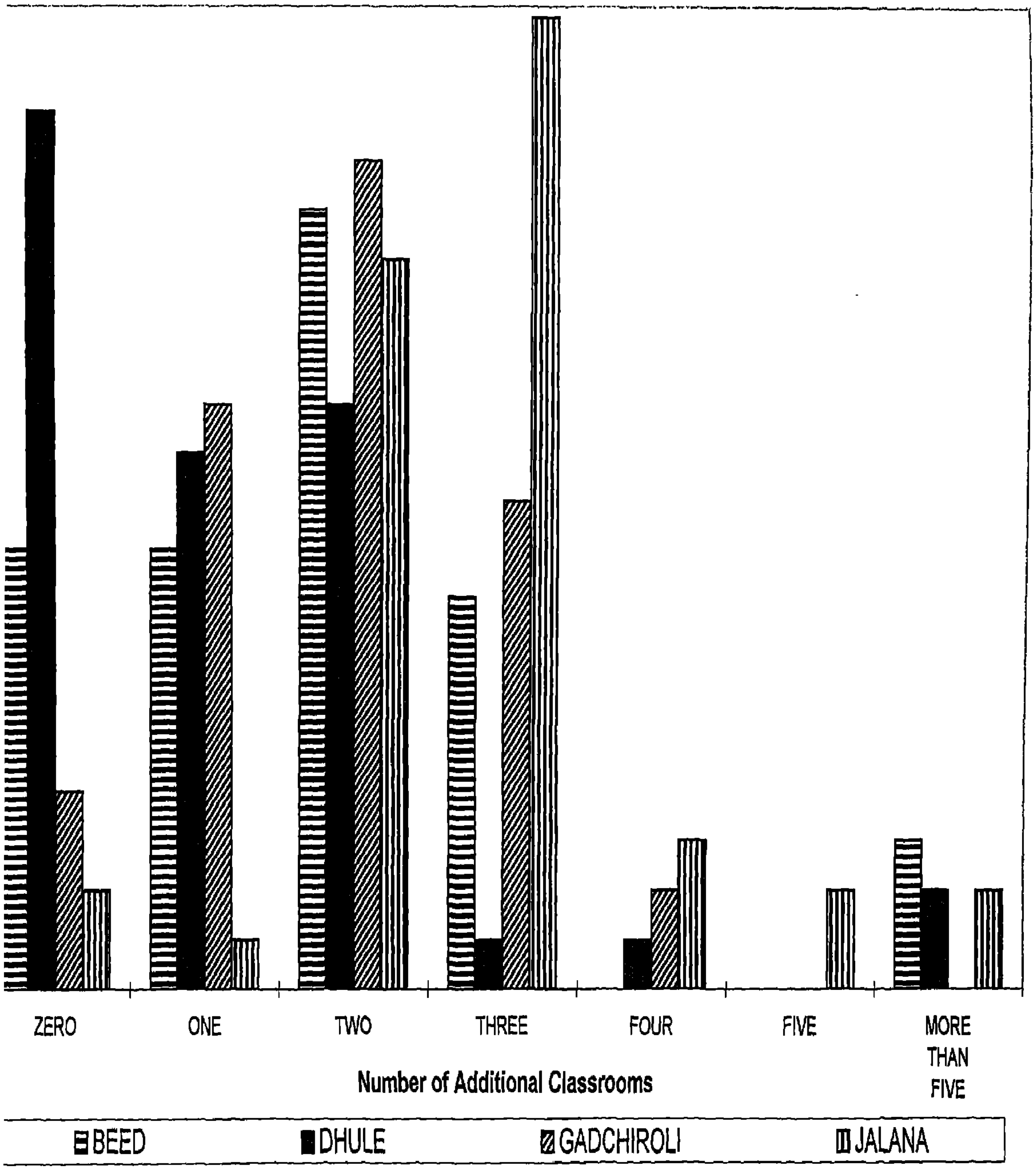
Table 4.13 and Figure 4.13 describe the percentage of schools requiring additional number of classrooms. The requirement of classrooms differs from district to district. **No classrooms are required** has been reported by the least percent of schools from Jalana district . This indicates that a fairly large number of schools in Jalana district require additional classrooms. 40% schools in Dhule district report that they don't require additional classrooms.

This means about 60% schools in Dhule are short of classrooms. About 35% schools have reported that they require two additional classrooms. In short, districtwise construction plan for additional classrooms needs to be developed on priority basis.

Table 4.13 : Percentage of Schools Requiring Additional Classrooms

Number of Classrooms	Districts Beed	Dhule	Gadchiroli	Jalana
Zero	20.00	40.00	08.89	04.44
One	20.00	24.44	26.67	02.22
Two	35.56	26.67	37.78	33.33
Three	17.78	02.22	22.22	44.44
Four	0.00	02.22	04.44	06.67
Five	0.00	0.00	0.00	4.44
More than Five	06.67	04.44	0.00	04.44

Figure 4.13 : Percentage of Schools Requiring Additional Classrooms



Percentages of schools having essential facilities are given in Table 4.14. About 36 to 60% schools have safe drinking water facility. It is the lowest in Jalana district. Separate toilets for girls are available in 2% to 9% schools . This is comparatively more in case of toilets for boys (9% to 16%).

About 7% to 29% schools have reported that they have electric connections. This percentage is very low with districtwise variations. This hampers the use of electric appliances like tape-recorder, colour TV sets, etc which are lying idle. Schoolwise requirements need to be identified and made available by the district authorities .

Table 4.14 : Percentage of Schools Having Essential Facilities

Facilities	Districts			
	Beed	Dhule	Gadchiroli	Jalana
Safe Drinking Water	46.67	57.78	60.00	35.56
Toilet Facilities	11.11	15.56	08.89	08.89
Separate Toilet facilities for Girls	08.89	06.67	04.44	02.22
Electric Connection for The Schools	28.89	06.67	22.22	13.33

The data about schools having furniture and equipment are given in Table 4.15. Most of the schools in Beed, Dhule and Jalana districts have reported the availability of furniture such as tables, chairs, school bells , water pitcher and ladle glass. In Gadchiroli district teachers do not have tables and the schools do not have water pitchers and ladle glasses. About 42% schools in Beed district have no chairs for teachers .

Table 4.15 : Percentage of Schools with Furniture and Equipment

Facilities	Districts			
	Beed	Dhule	Gadchiroli	Jalana
Chair for Teacher	57.78	95.56	97.78	80.00
Table for Teacher	66.67	91.11	00.00	84.44
Water Pitcher and Ladle Glass	91.11	100.00	00.00	93.33
Dustbin	35.56	33.33	64.44	66.67
School Bell	86.67	82.22	77.78	97.78
Pin-up Board/ Notice Board	37.78	42.22	53.33	26.67

From Table 4.16, it is seen that the percentage of schools with availability of facilities for cocurricular activities ranges from 51% to 64%. There are districtwise variations. About 50% schools in Gadchiroli and Jalana districts have reported the availability of games equipment and musical instruments.

Beed and Dhule districts have a very small proportion (13% to 24%) of games equipment and musical instruments. A care needs to be taken to make a provision for play materials to make the teaching and learning more meaningful and joyful.

Table 4.16 : Percentage of Schools with Availability of Facilities for Curricular Activities

Facilities	Districts Beed	Dhule	Gadchiroli	Jalana
Play Material Toys	55.56	60.00	51.11	64.44
Game Equipments	37.78	57.78	48.89	51.11
Musical Instruments	13.33	24.44	48.89	46.67

About 33% to 56% schools have playgrounds within the school premises (Table 4.17). This means a large number of schools do not have a playground within the school premises. This hampers the attendance of children at school. Plans are required to make provision for a sufficient space for children to play and enjoy learning.

Table 4.17 : Percentage of Schools Having Playgrounds

Facilities	Districts Beed	Dhule	Gadchiroli	Jalana
Playground (Away from School Premises)	33	58	36	33
Playground Within the School Premises	40	56	33	36

A fairly large percent (69 to 91 %) of schools have regular annual medical checkup of students (Table 4.18). Very few schools have reported the availability of First Aid Kit box (18% to 24%). Beed district has the lowest percentage of schools (69%) having medical facilities follo-wed by Dhule district (71%). It seems that schools from Gadchiroli district have better medical facilities as compared to other districts.

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Figure 4.17 Percentage of Schools Having Playgrounds

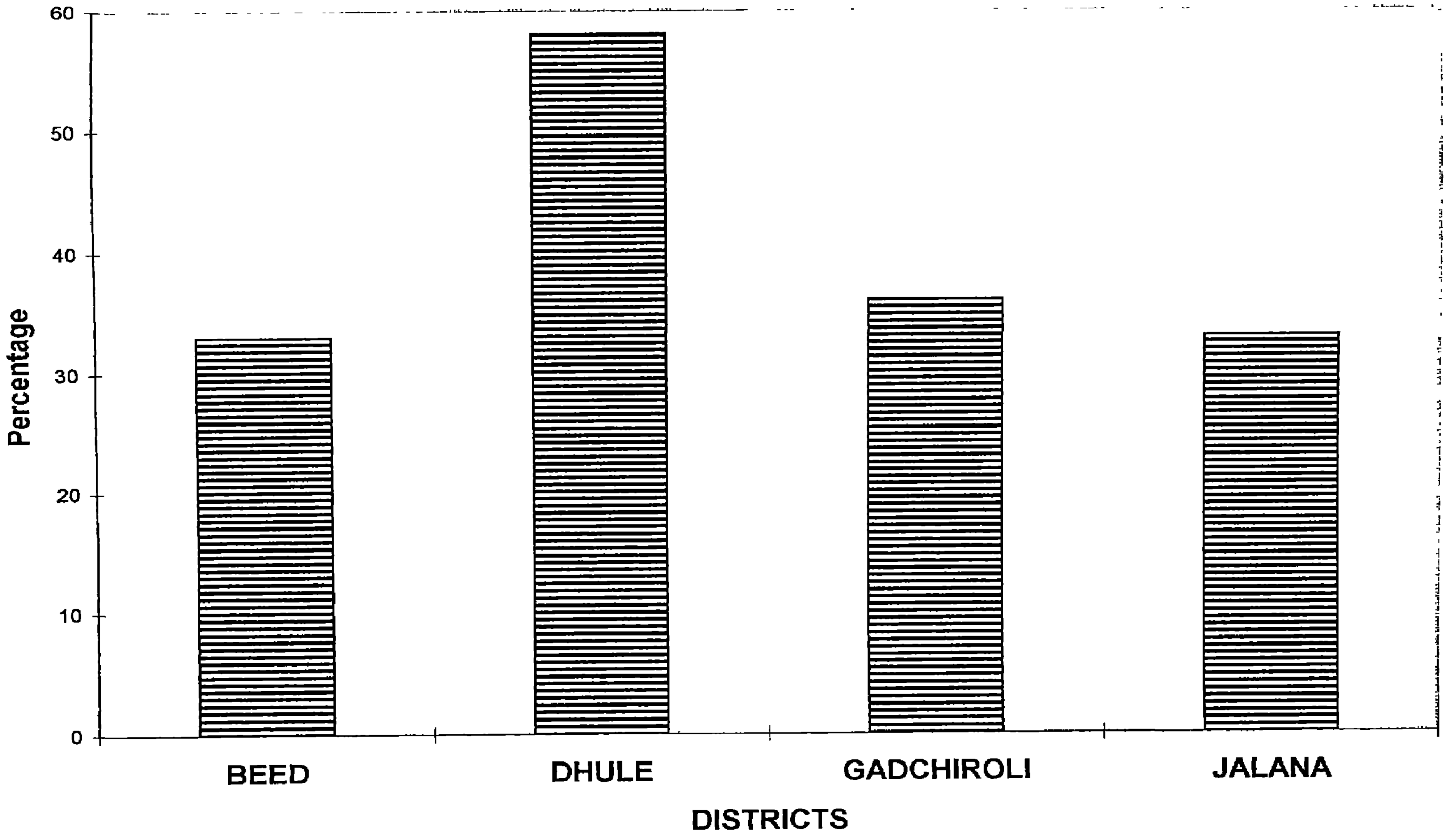


Table 4.18 : Percentage of Schools with Medical Facilities

Facilities	Districts Beed	Dhule	Gadchiroli	Jalana
Annual Medical Checkup	69	71	91	84
Immunisation Facility	64	84	87	78
First Aid Kit	22	24	18	31

Table 4.19 gives information about teacher -pupil ratio based on the sanctioned strength (Apparent). It is 43.91, 35.13, 25.94 and 35.44 in Beed , Dhule , Gadchiroli and Jalana district respectively. However, figures based on teachers in actual position (Effective) at the time of field visit are found to be higher in all the four districts (Figure 4.19) .

There are no surplus teachers observed. However , there is a need to appoint more teachers thereby minimising the multigrade teaching at the primary school level. Teacher pupil ratio in Gadchiroli district is the lowest and it is the highest in Dhule district. .

Table 4.19 : Apparent and Effective Teacher-Pupil Ratio

Teacher Pupil Ratio	Districts Beed	Dhule	Gadchiroli	Jalana
Apparent (APR)	43.91	35.13	25.94	35.44
Effective (EPR)	46.56	37.32	32.16	43.28

Table 4.20 gives distribution of Male and female teachers on roll during the first session of the academic year 1996-97. It is clear from this table that there is an uneven distribution of male and female teachers. It is the lowest in Gadchiroli district.

Table 4.20 : Average Number of Teachers on Roll

Session	Teachers	Districts Beed	Dhule	Gadchiroli	Jalana
1996-97	Male	153	114	80	87
	Female	63	78	20	35
	Total	216	192	100	122

Figure 4.18 : Percentage of Schools With Medical Facilities

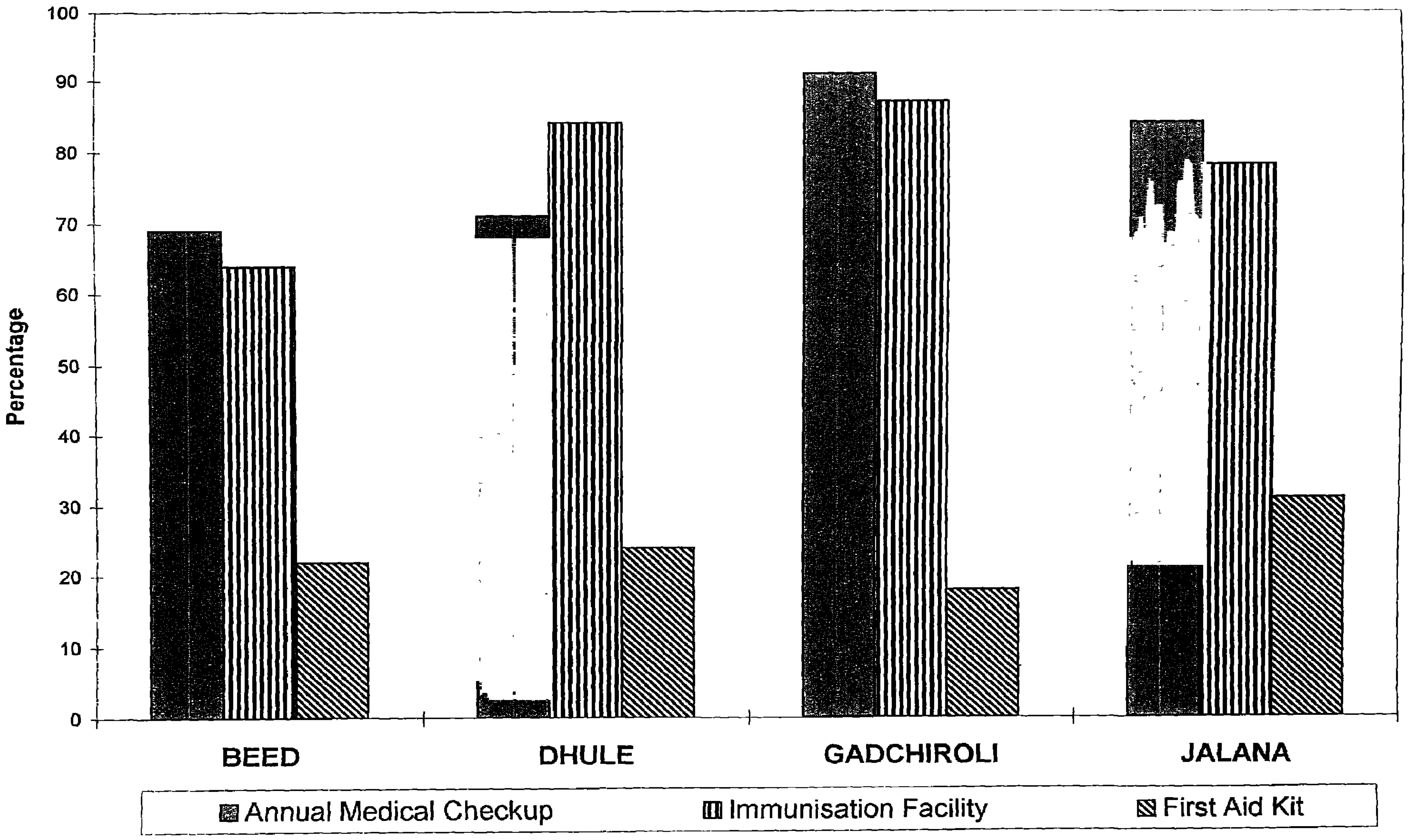
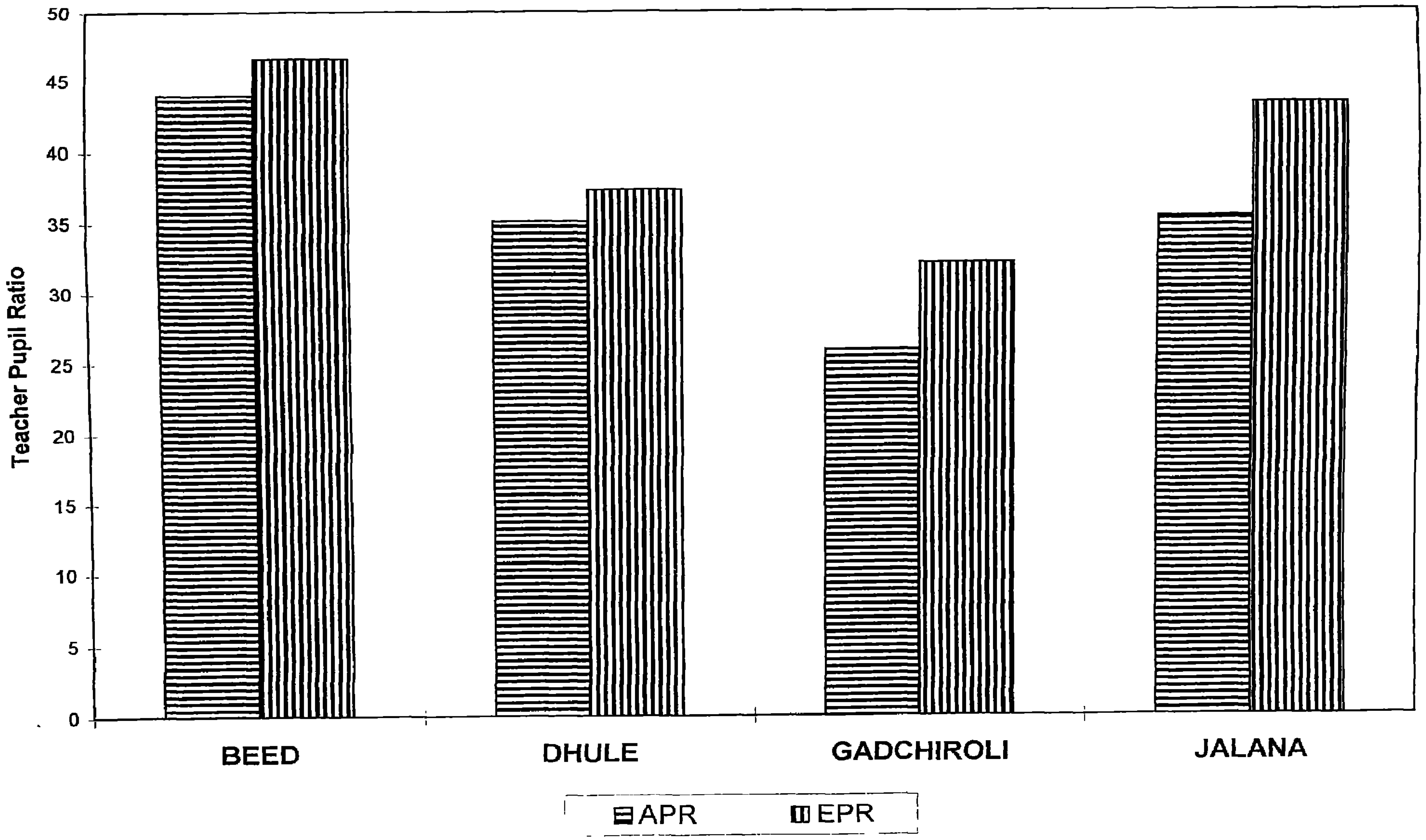


Figure 4.19 : Apparent and Effective Teacher- Pupil Ratio



Figures in Table 4.21 are the percentages of schools with vacant posts of teachers. A fairly lage percent of schools are short of teachers. Jalana district has the highest number of vacant posts (57%) followed by Gadchiroli (44%) and Dhule (20%). It needs to be noted here that this has a direct impact on low quality of learning achievement of school children.

Table 4.21 : Percentage of Schools with Vacant Posts of Teachers

Vacant Post	Districts Beed	Dhule	Gadchiroli	Jalana
0	73.33	77.78	55.33	42.22
1	0.00	20.00	42.22	55.56
2	0.00	0.00	2.22	2.22
3	0.00	0.00	2.22	0.00
Above 3	0.00	0.00	0.00	0.00

Every sampled school in each of the four districts is short of teachers (Table 4.22). A bout 44% schools in Jalana district are in need of teachers. 33.33% schools require one additional teacher in Jalana and 24.44% in Gadchiroli district. Manpower planning needs to be improved.

Table 4.22 : Percentage of Schools Requiring Additional Teachers

Vacant Post	Districts Beed	Dhule	Gadchiroli	Jalana
0	75.56	86.67	68.89	55.56
1	0.00	6.67	24.44	33.33
2	0.00	4.44	4.44	6.67
3	0.00	0.00	0.00	2.22
Above 3	2.22	0.00	2.22	2.22

Table 4.23 : Percentage of Schools Receiving Community Contribution

Contribution	Districts Beed	Dhule	Gadchiroli	Jalana
No Contribution	66.67	53.33	77.78	60.00
Rs 1-500	15.56	15.56	13.33	20.00
Rs 501- 1000	8.89	11.11	2.22	2.22
Rs 1001-1500	2.22	8.89	2.22	11.11
Rs 1501-2000	4.44	2.22	0.00	4.44
Above Rs 2000	2.22	8.89	4.44	2.22

Majority of schools in all the four districts do not receive any contribution from the community (Table 4.23). It is the highest in Gadchiroli district followed by Beed. Contribution by the community is seen more in Dhule district (47%). Community mobilization programmes are required to be launched immediately in all the four districts. VECs may be strenghthened. ☐

CHAPTER 5

THE TEACHER

Teachers background, their academic and professional qualifications, their training needs, teaching - learning materials and aids, supervision, teaching related activities, etc are presented in the form of 33 tables in this chapter.

It also covers the ways and methods of organising teaching and learning activities in a classroom. The information compiled here is based on the filled in Teacher Schedule (TS).

A total number of 444 teachers (320 males and 124 females) from 180 schools in four districts were interviewed. Table 2.4 reveals that the number varied from district to district (144 teachers in Dhule and 87 in Gadchiroli).

Districtwise percentage distribution of the teachers on the basis of Gender, Area and Category is given in Table 5.1. The data indicates that the percentage of female teachers is much lower than males, particularly in Gadchiroli district (18%) followed by Jalana (21%).

Categorywise distribution highlights the low proportion of SC and ST teachers in Beed and Jalana districts. Maximum number of teachers were from Others category in Beed and Jalana districts, whereas teachers belonging to OBC category were found more in number in Dhule and Gadchiroli districts.

It is, therefore, necessary to review both recruitment and posting policies at the district level.

Table 5.1 : Percentage Distribution of Sample Teachers

	Gender		Area		Category			
Districts	Male	Female	Rural	Urban	SC	ST	OBC	Others
Beed	75	25	75	25	12	3	17	66
Dhule	60	40	71	29	15	16	42	28
Gadchiroli	82	18	77	23	14	34	45	7
Jalana	79	21	67	33	15	4	18	63

Majority of the sampled male teachers fell in the 45 and above age group in all the four districts (Table 5.2).

On the other hand, most of the women teachers belonged to the lower age group of 35-44. This is seen still lower in Gadchiroli district (30-34). This is the result of social awareness about the reservation policy for recruiting teachers from ST category.

Table 5.2 : Percentage Distribution of Teachers According to Age (Genderwise)

District	Age Group (in Years)	Number of Teachers Male	 Female	 Total
Beed	Below 25	10.66	4.10	14.75
	25-29	13.93	4.92	18.85
	30-34	11.48	3.28	14.75
	35-44	13.11	9.02	22.13
	45 and Above	23.77	4.10	27.87
Dhule	Below 25	5.56	5.56	11.11
	25-29	11.11	6.94	18.06
	30-34	5.56	8.33	13.89
	35-44	5.56	7.64	13.19
	45 and Above	31.94	11.81	43.75
Gadchiroli	Below 25	10.34	1.15	11.49
	25-29	25.29	2.30	27.59
	30-34	13.79	8.05	21.84
	35-44	6.90	2.30	9.20
	45 and Above	25.29	4.60	29.89
Jalana	Below 25	10.99	5.49	16.48
	25-29	24.18	2.20	26.37
	30-34	12.09	2.20	14.29
	35-44	7.69	5.49	13.19
	45 and Above	24.18	5.49	29.67

Education and Training

Table 5.3 and Table 5.4 show that majority of the sampled teachers are matric pass in all the four districts (59.84 to 73.63 percent). The highest percentage of matriculates is found in Jalana district (73.63 percent) followed by Dhule (68.06 percent). Matriculate teachers are the least in number among the percentage of majority teachers in Beed (59.84 percent) district. The percentage of Graduate teachers is the least in Gadchiroli (1.15 percent only) district, but it is comparatively more in Beed (21.31 %) , Dhule (20.14 %) and Jalana (16.48 %) districts.

Percentage of teachers having Higher Secondary Certificate is comparatively small in Beed (8.20 percent) , Dhule (6.25 percent) , and Jalana (8.79 percent) districts. It is surprisingly high in Gadchiroli district (28.74 percent). There are no teachers having qualification below Matriculation in Jalana district, but there are 4.17 percent, 5.74 percent and 5.75 percent teachers under Matriculation in Dhule, Beed and Gadchiroli districts respectively .

As quality of education depends on quality of teachers , their general educational level is required to be increased in all the four districts under study.

Table 5.3 : Percentage Distribution of Teachers According to Educational Level (Genderwise)

District	Qualification	Number of Teachers		
		Male	Female	Total
Beed	Class VIII	4.10	1.64	5.74
	Matriculation	47.54	12.30	59.84
	Hr. Secondary	5.74	2.46	8.20
	Graduation	13.93	7.38	21.31
	Post-Graduation	1.64	1.64	3.28
Dhule	Class VIII	3.47	0.69	4.17
	Matriculation	42.36	25.69	68.06
	Hr. Secondary	3.47	2.78	6.25
	Graduation	9.72	10.42	20.14
	Post-Graduation	10.69	0.69	1.39
Gadchiroli	Class VIII	4.60	1.15	5.75
	Matriculation	50.57	13.79	64.37
	Hr. Secondary	25.29	3.45	28.74
	Graduation	1.15	0.00	1.15
	Post-Graduation	0.00	0.00	0.00
Jalana	Class VIII	0.00	0.00	0.00
	Matriculation	59.34	14.29	73.63
	Hr. Secondary	8.79	0.00	8.79
	Graduation	9.89	6.59	16.48
	Post-Graduation	1.10	0.00	1.10

Table 5.4 : Percentage Distribution of Teachers According to Educational Level (Areawise)

District	Qualification	Number of Teachers		
		Rural	Urban	Total
Beed	Class VIII	4.10	1.64	5.74
	Matriculation	47.54	12.30	59.84
	Hr. Secondary	7.38	0.82	8.20
	Graduation	13.93	7.38	21.31
	Post-Graduation	1.64	1.64	3.28
Dhule	Class VIII	3.47	0.69	4.16
	Matriculation	50.00	18.06	68.06
	Hr. Secondary	5.56	0.69	6.25
	Graduation	11.81	8.33	20.14
	Post-Graduation	0.00	1.39	1.39
Gadchiroli	Class VIII	3.45	2.30	5.75
	Matriculation	47.13	17.24	64.37
	Hr. Secondary	25.29	3.45	28.74
	Graduation1	1.15	0.00	1.15
	Post-Graduation	0.00	0.00	0.00
Jalana	Class VIII	0.00	0.00	0.00
	Matriculation	51.65	21.98	73.63
	Hr. Secondary	6.59	2.20	8.79
	Graduation	7.69	8.79	16.48
	Post-Graduation	1.10	0.00	1.10

Table 5.5 : Percentage Distribution of Teachers According to Professional Training

District	Teachers Training	Number of Teachers Male	Female	Total	Rural	Urban	Total
Beed	Primary/ Elementary Teacher Certificate / Diploma	63.93	21.31	85.25	65.57	19.67	85.25
	Graduate Trained B.Ed or Equivalent	4.10	1.64	5.74	3.28	2.46	5.74
	M.Ed & Above	0.82	0.00	0.82	0.82	0.00	0.82
Dhule	Primary/ Elementary Teacher Certificate / Diploma	53.47	37.50	90.97	64.58	26.39	90.97
	Graduate Trained B.Ed or Equivalent	1.39	1.39	2.78	0.69	2.08	2.78
	M.Ed & Above	0.00	0.00	0.00	0.00	0.00	0.00
Gadchiroli	Primary/ Elementary Teacher Certificate / Diploma	60.92	16.09	77.01	55.17	21.84	77.01
	Graduate Trained B Ed or Equivalent	0.00	0.00	0.00	0.00	0.00	0.00
	M.Ed & Above	0.00	0.00	0.00	0.00	0.00	0.00
Jalana	Primary/ Elementary Teacher Certificate / Diploma	76.92	19.78	96.70	64.84	31.87	96.70
	Graduate Trained B.Ed or Equivalent	1.10	0.00	1.10	1.10	0.00	1.10
	M.Ed & Above	1.10	0.00	1.10	1.10	0.00	1.10

Table 5.5 indicates that more than 90 percent teachers are trained teachers in Beed, Dhule and Jalana districts. Jalana district has 100 percent trained teachers and only 77 percent are trained (Diploma in Education) teachers in Gadchiroli district. A small percentage of teachers having B. Ed and M. Ed. as qualifications is found in Beed, Dhule and Jalana district, but no teacher in Gadchiroli district is seen having this level of training . As higher qualifications of a teacher improve his professional competence , teachers need to be encouraged to pursue higher studies.

Table 5.6 : Percentage of Untrained Teachers

District	Percentage
Beed	13
Dhule	17
Gadchiroli	23
Jalana	4

Table 5.6 gives the percentage of untrained teachers in the four districts. It is the highest in Gadchiroli district (23 %) and the lowest in Jalana (4 %) . Steps need to be taken to train all those untrained teachers if the quality of classroom teaching has to be improved.

Table 5.7 : Percentage of Teachers without In-service Training

District	Percentage of Teachers					
	Male	Female	Total	Rural	Urban	Total
Beed	40.16	18.85	59.02	41.80	17.21	59.02
Dhule	48.61	32.64	81.25	56.94	24.31	81.25
Gadchiroli	26.44	4.60	31.03	25.29	5.75	31.03
Jalana	65.93	17.58	83.52	58.24	25.27	83.52

The data about the status of in-service training of teachers were collected and tabulated in Table 5.7. It reveals that a high percentage (83.52 percent) of teachers in Jalana and Dhule (81.25 percent) district have not received any in-service training in the last three years. About 31 percent teachers in Gadchiroli district have not received in-service training in the last three years. This may be one of the reasons for low achievement of children. In-service training programmes need to be planned to suit the needs of teachers in all the four districts.

Table 5.8 : Percentage of Teachers Desirous of In-service Training

	District			
	Beed	Dhule	Gadchiroli	Jalana
Percentage	85	89	93	78

Table 5.9 : Percentage of Teachers Reporting on Available Teaching Facilities

District	Basic Facility	Number of Teachers					
		Male	Female	Total	Rural	Urban	Total
Beed	Blackboard	70.49	25.41	95.90	72.13	23.77	95.90
	Duster	67.21	25.41	92.62	68.85	23.77	92.62
	Table for Teachers	46.72	20.49	67.21	47.54	19.67	67.21
	Chair for Teachers	55.74	24.59	80.33	56.56	23.77	80.33
	Cupboard	17.21	8.20	25.41	14.75	10.66	25.41
Dhule	Blackboard	59.72	40.28	100	70.83	29.17	100
	Duster	56.94	38.19	95.14	67.36	27.78	95.14
	Table for Teachers	55.56	36.81	92.36	66.67	25.69	92.36
	Chair for Teachers	57.64	38.19	95.83	68.75	27.08	95.83
	Cupboard	32.64	25	57.64	34.03	23.61	57.64
Gadchiroli	Blackboard	80.23	18.60	98.84	75.58	23.26	98.84
	Duster	79.07	18.60	97.67	74.42	23.26	97.67
	Table for Teachers	81.40	17.44	98.84	75.58	23.26	98.84
	Chair for Teachers	80.23	17.44	97.67	74.42	23.26	97.67
	Cupboard	32.56	8.14	40.70	33.72	6.98	40.70
Jalana	Blackboard	78.02	18.68	96.70	65.93	30.77	96.70
	Duster	75.82	19.78	95.60	63.74	31.87	95.60
	Table for Teachers	74.73	15.38	90.11	59.34	30.77	90.11
	Chair for Teachers	67.03	17.58	84.62	54.95	29.67	84.62
	Cupboard	28.57	3.30	31.87	25.27	6.59	31.87

The percentage distribution of teachers who want to undergo in-service training is given in Table 5.8 . A very high percentage of teachers have expressed their desire to undergo in-service training . This is a very good sign . Provision needs to be made for continuous training of teachers.

Availability of Basic Facilities and Teaching Aids

Table 5.9 on page 60 shows that almost all schools have basic facilities such as blackboards, dusters, Tables and chairs. About 20 percent teachers in Beed district do not have chairs for themselves. Chairs for teachers in Beed district need to be made available on priority basis. About 32- 58 percent schools have cupboards. This means that a large number of schools require cupboards . It becomes , therefore , necessary to supply cupboards to all those needy schools in all the four districts.

Information about available teaching aids such as Maps, the Globe , Flash Cards, Charts , Science Kit box , Mathematics Kit box , etc is consolidated in Table 5.10. It is seen that only 35.42 percent schools in Dhule district have the Globe. The Globe needs to be supplied to the schools in Dhule district.

A list of school-wise requirement of teaching aids needs to be prepared and necessary teaching aids be supplied to schools accordingly. Majority of teachers have reported that they do not have dictionaries . The lowest percentage of teachers have reported on availability of flash cards. Availability of Science Kits reported by teachers is very high. But they are hardly seen used by the teachers , as reported by field investigators. Training is required in making use of these kit boxes.

Table 5.10 : Percentage of Teachers Reporting on Available Teaching Aids

Teaching Aids	Districts			
	Beed	Dhule	Gadchiroli	Jalana
Teacher's Guide	70.49	68.06	70.93	57.14
Dictionary	45.90	43.06	43.02	35.16
Map	81.97	74.31	91.86	97.80
Globe	77.05	35.42	79.07	71.43
Charts	73.77	88.19	83.72	82.42
Flash Cards	54.10	61.11	67.44	70.33
Science Kit	67.21	86.81	80.23	92.31
Mathematics Kit	71.31	80.56	50.00	79.12
Books (Other than Textbooks)	75.41	79.86	76.74	83.52
Others	32.79	49.31	32.56	25.27

Teaching Pattern

Table 5.11 indicates that the Multi-grade teaching pattern prevails in all the four districts. It is prominent in Gadchiroli (65.52 percent) and it is seen practised by comparatively less number (about 32 percent) of schools in Dhule district. This may be one of the major causes of low achievement of Class II and Class IV students. Training in

teaching in Multi- grade situation needs to be given . It must be strengthened for better utilization of man power for teaching and learning.

Table 5.11 : Percentage of Teachers in Multi-Grade Teaching Situation (Genderwise)

District	Percentage of Teachers		
	Male	Female	Total
Beed	44.26	3.28	47.54
Dhule	25.00	6.94	31.94
Gadchiroli	59.77	5.75	65.52
Jalana	58.24	3.30	61.54

Table 5.12 : Percentage of Simultaneous Allocation of Tasks by the Teacher in MultiGrade Teaching Situations (Genderwise and Areawise)

District	Categories	Number of Teachers					
		Male	Female	Total	Rural	Urban	Total
Beed	Copy Work	25.41	1.64	27.05	26.23	0.82	27.05
	Wait, Work on their Own, Play	11.48	0.82	12.30	12.30	0.00	12.30
	Supervision by Older Children	3.28	0.00	3.28	3.28	0.00	3.28
	Others	0.00	0.00	0.00	0.00	0.00	0.00
Dhule	Copy Work	15.28	5.56	20.83	19.44	1.39	20.83
	Wait, Work on their Own, Play	7.64	0.69	8.33	8.33	0.00	8.33
	Supervision by Older Children	1.39	0.00	1.39	1.39	0.00	1.39
	Others	0.69	0.69	1.39	1.39	0.00	1.39
Gadchiroli	Copy Work	43.68	3.45	47.13	45.98	1.15	47.13
	Wait, Work on their Own, Play	13.79	1.15	14.94	13.79	1.15	14.94
	Supervision by Older Children	0.00	0.00	0.00	0.00	0.00	0.00
	Others	1.15	0.00	1.15	1.15	0.00	1.15
Jalana	Copy Work	46.15	2.20	48.35	48.35	0.00	48.35
	Wait, Work on their Own, Play	8.79	0.00	8.79	8.79	0.00	8.79
	Supervision by Older Children	1.10	0.00	1.10	1.10	0.00	1.10
	Others	1.10	0.00	1.10	1.10	0.00	1.10

Information regarding simultaneous allocation of tasks given to students by teachers in Multi-grade teaching situation is summarised in Table 5.12. It tells about various tasks the teachers in multi-grade classes assigned other students whilst teaching one group of students.

Copy work (21 - 48%) seems to be the main task given to students (21 - 48 percent). **Wait , work on their own or Play (8 - 15 %)** is reported as the other major activity. Multi-grade teaching needs to be strengthened . Percentage of copy work is comparatively less in Dhule (20.83%) district.

Table 5.13 Percentage of Teachers' Activities on the Basis of Time Allocation

Activity	Districts			
	Beed	Dhule	Gadchiroli	Jalana
Giving Tution to the Children	57.38	59.72	62.79	70.33
Providing Feedback	2.46	3.47	1.16	1.10
Correcting Tests / Homework	10.66	6.94	6.98	1.10
Holding Extra Classes	4.10	0.69	3.49	3 30
Planning and Preparation for Class	23.77	28.47	25.58	24.18

Teachers in all the four districts devoted their maximum time in carrying out two major activities viz., giving tuition to the children (57 - 70 percent) and planning & preparation for class (24 - 28 percent). Time spent on holding extra classes was the least Table (5.13). Providing feedback was also found very weak. These components need to be included in in- service teacher training programmes.

Table 5.14 : Percentage of the Use of Textbooks and Teaching Material (Genderwise)

District	Options	Language			Mathematics		
		Male	Female	Total	Male	Female	Total
Beed	Textbooks	59.84	18.85	78.69	16.39	4.10	20.49
	Specially Prepared Material	2.46	0.82	3.28	41.80	16.39	58.20
	Do not Teach These Subjects	10.66	5.74	16.39	14.75	4.92	19.67
Dhule	Textbooks	56.94	37.50	94.44	20.14	11.81	31.94
	Specially Prepared Material	2.78	2.78	5.56	38.89	28.47	67.36
	Do not Teach These Subjects	0.00	0.00	0.00	0.69	0.00	0.69
Gadchiroli	Textbooks	75.58	16.28	91.86	53.49	9.30	62.79
	Specially Prepared Material	3.49	2.33	5.81	25.58	9.30	34.88
	Do not Teach These Subjects	2.33	0.00	2.33	2.33	0.00	2.33
Jalana	Textbooks	76.92	20.88	97.80	49.45	4.40	53.85
	Specially Prepared Material	0.00	0.00	0.00	27.47	15.38	42.86
	Do not Teach These Subjects	2.20	0.00	2.20	2.20	1.10	3 30

It is clear from Table 5.14 that a very high percentage of teachers (79 to 98 %) in all the four districts use mainly textbooks for teaching Language in Class IV.

The percentage of teachers using textbooks for teaching is reported low in Beed district (78.69%) when compared to other districts. However, specially prepared materials are also used by sampled teachers (35 - 67 percent) to teach Mathematics. About one third (34%) teachers in Gadchiroli district prepare teaching material for teaching mathematics. Teachers need to be motivated in this regard.

Table 5.15 : Use of Textbook in Percentage By Teachers

District	Options	Total
Beed	Read and Explain from Textbooks	89.34
	Ask Children to Read From the Textbook on Their Own	83.61
	Assigning Homework From the Textbook	84.43
	Do Not Use Textbooks at All	10.66
Dhule	Read and Explain from Textbooks	97.92
	Ask Children to Read From the Textbook on Their Own	90.97
	Assigning Homework From the Textbook	95.83
	Do Not Use Textbooks at All	5.56
Gadchiroli	Read and Explain from Textbooks	94.19
	Ask Children to Read From the Textbook on Their Own	91.86
	Assigning Homework From the Textbook	93.02
	Do Not Use Textbooks at All	5.81
Jalana	Read and Explain from Textbooks	98.90
	Ask Children to Read From the Textbook on Their Own	94.51
	Assigning Homework From the Textbook	97.80
	Do Not Use Textbooks at All	6.59

Teachers reported that they used textbooks mainly for reading & explaining, and assigning homework to students (Table 5.15). It seems that an extensive use of textbooks is made. However, the performance of students is not seen to that extent satisfactory.

Table 5.16 : Teachers Reporting on the Source of the Preparation of Teaching Materials (in Percent)

District	Preparation Of Teaching Materials	Genderwise			Areawise		
		Male	Female	Total	Rural	Urban	Total
Beed	Self	38.52	9.84	48.36	40.16	8.20	48.36
	Students	6.56	3.28	9.84	6.56	3.28	9.84
	Provided-by School	22.13	9.84	31.97	21.31	10.66	31.97
	Any Other	0.82	0.82	1.64	0.82	0.82	1.64
Dhule	Self	49.31	32.64	81.94	60.42	21.53	81.94
	Students	2.78	2.08	4.86	4.17	0.69	4.86
	Provided-by School	6.25	4.86	11.11	6.25	4.86	11.11
	Any Other	1.39	0.00	1.39	0.00	1.39	1.39
Gadchiroli	Self	60.47	15.12	75.58	56.98	18.60	75.58
	Students	3.49	0.00	3.49	2.33	1.16	3.49
	Provided-by School	10.47	1.16	11.63	9.30	2.33	11.63
	Any Other	1.16	1.16	2.33	1.16	1.16	2.33
Jalana	Self	48.35	18.68	67.03	40.66	26.37	67.03
	Students	0.00	1.10	1.10	0.00	1.10	1.10
	Provided-by School	19.78	0.00	19.78	16.48	3.30	19.78
	Any Other	2.20	1.10	3.30	3.30	0.00	3.30

Table 5.16 reveals that teachers use the teaching materials prepared by themselves (48 - 82 percent) and the material supplied by the school.

Table 5.17 Percentage Distribution of Teachers Assigning Homework

Homework Given	Percentage of Teachers			
	Beed	Dhule	Gadchiroli	Jalana
Regularly	78.69	95.14	44.19	91.21
Sometimes	17.21	4.17	52.33	7.69
Not at All	2.46	0.69	3.49	1.10

As reported in Table 5.17 majority of teachers in Dhule and Jalana districts give homework regularly. But the percentage of teachers reporting giving homework is seen very low in Beed (78.69 %) and Gadchiroli (44.19 %) as compared to other districts. Teacher training programmes need to emphasize this important aspect of learning achievement.

Table 5.18 : Percentage Distribution of Teachers Giving Homework in Language (In Terms of Number of Pages)

District	No. of Pages	Genderwise			Areawise		
		Male	Female	Total	Rural	Urban	Total
Beed	Zero	13.11	4.92	18.03	9.84	8.20	18.03
	One	34.43	14.75	49.18	36.89	12.30	49.18
	Two	22.13	3.28	25.41	22.13	3.28	25.41
	Three	3.28	0.82	4.10	4.10	0.00	4.10
	Four	0.82	1.64	2.46	1.64	0.82	2.46
	Five & Above	0.82	0.00	0.82	0.82	0.00	0.82
Dhule	Zero	1.39	0.00	1.39	1.39	0.00	1.39
	One	39.58	26.39	65.97	52.08	13.89	65.97
	Two	15.97	9.03	25.00	15.97	9.03	25.00
	Three	0.69	2.08	2.78	0.00	2.78	2.78
	Four	1.39	0.00	1.39	0.69	0.69	1.39
	Five & Above	0.69	2.78	3.47	0.69	2.78	3.47
Gadchiroli	Zero	10.47	1.16	11.63	10.47	1.16	11.63
	One	62.79	12.79	75.58	58.14	17.44	75.58
	Two	6.98	3.49	10.47	5.81	4.65	10.47
	Three	0.00	1.16	1.16	1.16	0.00	1.16
	Four	0.00	0.00	0.00	0.00	0.00	0.00
	Five & Above	1.16	0.00	1.16	1.16	0.00	1.16
Jalana	Zero	4.40	0.00	4.40	1.10	3.30	4.40
	One	54.95	14.29	69.23	46.15	23.08	69.23
	Two	15.38	5.49	20.88	15.38	5.49	20.88
	Three	3.30	1.10	4.40	3.30	1.10	4.40
	Four	0.00	0.00	0.00	0.00	0.00	0.00
	Five & Above	1.10	0.00	1.10	1.10	0.00	1.10

Majority teachers gave one or two pages homework in Language (Table 5.18) . But it was reported by a small percentage of teachers that they did not give homework. When interviewed majority teachers (40 to 64 %) reported that they gave 4 -6 sums for homework in Mathematics (Table 5.19).

Table 5.19 : Percentage Distribution of Teachers Giving Homework in Mathematics(In Terms of Number of Sums)

District	No. of Sums	Genderwise			Areawise		
		Male	Female	Total	Rural	Urban	Total
Beed	0	17.21	4.92	22.13	11.48	10.66	22.13
	1-3	6.56	3.28	9.84	8.20	1.64	9.84
	4-6	35.25	10.66	45.90	36.89	9.02	45.90
	7-9	4.10	0.00	4.10	4.10	0.00	4.10
	10-15	2.46	0.00	2.46	2.46	0.00	2.46
Dhule	0	2.08	0.00	2.08	1.39	0.69	2.08
	1-3	4.17	3.47	7.64	6.25	1.39	7.64
	4-6	29.17	20.83	50.00	36.81	13.19	50.00
	7-9	2.08	2.08	4.17	3.47	0.69	4.17
	10-15	1.39	0.00	1.39	1.39	0.00	1.39
Gadchiroli	0	10.47	3.49	13.95	12.79	1.16	13.95
	1-3	33.72	5.81	39.53	32.56	6.98	39.53
	4-6	32.56	9.30	41.86	29.07	12.79	41.86
	7-9	2.33	0.00	2.33	1.16	1.16	2.33
	10-15	0.00	0.00	0.00	0.00	0.00	0.00
Jalana	0	4.40	0.00	4.40	2.20	2.20	4.40
	1-3	12.09	0.00	12.09	9.89	2.20	12.09
	4-6	49.45	14.29	63.74	42.86	20.88	63.74
	7-9	5.49	2.20	7.69	6.59	1.10	7.69
	10-15	0.00	0.00	0.00	0.00	0.00	0.00

Table 5.20 : Teacher's Expectation of Studennts' Competencies

Class	Competency	Level	District			
			Beed	Dhule	Gadchiroli	Jalana
I	Rcognize	Below 40	6	9	35	6
	All	41-79	9	14	41	5
	Alphabets	80 and above	4	19	35	1
II	Take	Below 40	79.	87	30	40
	Dictation	41-79	71	88	31	41
	of Words	80 and above	77	75	23	45
III	Write	Below 40	36	36	15	41
	Simple	41-79	25	19	0	23
	Sentences	80 and above	35	23	11	33
IV	Read Text	Below 40	7	25	33	2
	And Answer	41-79	77	76	31	46
	Questions on it	80 and above	45	25	8	43
V	Write	Below 40	9	14	41	5
	A small	41-79	71	88	31	41
	Composition	80 and above	25	19	0	23

It was observed that majority of teachers expected their students to achieve between 41-79 percent and 80 & above level of achievement. In short, teachers had fairly high expectations from their students.

Table 5.21 : Percentage Distribution of Teachers Reporting on No Classroom Supervision

District	Head Teacher	BEO
Beed	4.10	4.10
Dhule	3.47	3.47
Gadchiroli	6.98	6.98
Jalana	0.00	0.00

Table 5.21 reveals that there is a system of classroom supervision by the head teacher or the BEO. A slightly higher percentage of teachers reporting no classroom supervision in Gadchiroli district (6.98 %) is seen as compared to the situation in Beed, Dhule and Jalana districts.

Table 5.22 : Percentage of Teachers and Their Compulsion for Being in the Present School

District	Reasons	Percentage of Teachers		
		Male	Female	Total
Beed	Personal and Family	19.67	7.38	27.05
	Compulsory Transfer	24.59	2.46	27.05
	Higher Salary and Benefits	1.64	1.64	3.28
	Greater Job Security	5.74	3.28	9.02
	Greater Job Satisfaction	7.38	5.74	13.11
	Less Work-Load and Responsibility	0.00	0.00	0.00
	Other Reasons	2.46	0.00	2.46
Dhule	Personal and Family	18.03	18.03	36.06
	Compulsory Transfer	17.21	5.74	22.95
	Higher Salary and Benefits	4.92	2.46	7.38
	Greater Job Security	1.64	4.10	5.74
	Greater Job Satisfaction	23.77	12.30	36.07
	Less Work-Load and Responsibility	0.00	0.82	0.82
	Other Reasons	3.28	2.46	5.74
Gadchiroli	Personal and Family	35.25	7.38	42.62
	Compulsory Transfer	5.74	2.46	8.20
	Higher Salary and Benefits	1.64	0.00	1.64
	Greater Job Security	4.10	0.82	4.92
	Greater Job Satisfaction	9.84	2.46	12.30
	Less Work-Load and Responsibility	0.00	0.00	0.00
	Other Reasons	0.82	0.00	0.82
Jalana	Personal and Family	18.03	7.38	25.41
	Compulsory Transfer	8.20	0.82	9.02
	Higher Salary and Benefits	0.00	0.00	0.00
	Greater Job Security	4.10	0.82	4.92
	Greater Job Satisfaction	26.23	6.56	32.79
	Less Work-Load and Responsibility	0.00	0.00	0.00
	Other Reasons	2.46	0.00	2.46

Teachers were asked for reasons of being there in the school. They gave various reasons for being in the present school. Compulsory transfer and personal & family reasons were the two main reasons reported by teachers. Greater job satisfaction was the other reason given . Greater job satisfction should go with high achievement of students , but this was not the situation . Therefore, it needs further study.

Table 5.23 : Percentage Distribution of Teachers on the Basis of Assistance from the Head Teacher /Principal

District	Categories	Genderwise			Areawise		
		Male	Female	Total	Rural	Urban	Total
	Not Applicable	8.20	0.00	8.20	8.20	0.82	9.02
	Very Helpful	27.87	13.11	40.98	27.87	11.48	39.34
Beed	Somewhat Helpful	9.02	9.02	18.04	9.02	8.20	17.22
	Not Helpful	29.51	3.28	32.79	29.51	4.10	33.61
	Not Applicable	0.00	0.00	0.00	0.00	0.00	0.00
	Very Helpful	26.39	22.92	49.31	26.39	17.36	43.75
Dhule	Somewhat Helpful	13.19	11.11	24.30	13.19	5.56	18.75
	Not Helpful	20.14	6.25	26.39	20.14	6.25	26.39
	Not Applicable	0.00	0.00	0.00	0.00	0.00	0.00
	Very Helpful	13.95	9.30	23.25	13.95	11.63	25.58
Gadchiroli	Somewhat Helpful	17.44	5.81	23.26	17.44	8.14	25.58
	Not Helpful	50.00	3.49	53.49	50.00	3.49	53.49
	Not Applicable	0.00	0.00	0.00	0.00	0.00	0.00
	Very Helpful	20.88	8.79	29.67	20.88	10.99	31.87
Jalana	Somewhat Helpful	8.79	7.69	16.48	8.79	10.99	19.78
	Not Helpful	49.45	4.40	53.85	49.45	10.99	60.44

Table 5.24 : Percentage Distribution of Teachers on the Basis of Assistance from BEO

District	Categories	Genderwise		
		Male	Female	Total
	Not Applicable	1.64	0.00	1.64
	Very Helpful	12.30	4.10	16.40
Beed	Somewhat Helpful	45.90	13.93	59.84
	Not Helpful	14.75	7.38	22.13
	Not Applicable	0.00	0.00	0.00
	Very Helpful	18.75	8.33	27.08
Dhule	Somewhat Helpful	40.28	28.47	68.75
	Not Helpful	0.69	3.47	4.16
	Not Applicable	0.00	0.00	0.00
	Very Helpful	8.14	2.33	10.47
Gadchiroli	Somewhat Helpful	50.00	10.47	60.47
	Not Helpful	23.26	5.81	29.07
	Not Applicable	0.00	0.00	0.00
	Very Helpful	17.58	5.49	23.07
Jalana	Somewhat Helpful	45.05	13.19	58.24
	Not Helpful	16.48	2.20	18.68

Table 5.25 : Percentage Distribution of Teachers on the Basis of Assistance from the Primary Teachers (Genderwise & Areawise)

District	Categories	Genderwise			Areawise		
		Male	Female	Total	Rural	Urban	Total
Beed	Not Applicable	2.46	0.00	2.46	2.46	0.82	3.28
	Very Helpful	35.25	10.66	45.90	35.25	11.48	46.72
	Somewhat Helpful	19.67	9.02	28.69	19.67	7.38	27.05
	Not Helpful	17.21	5.74	22.95	17.21	4.92	22.13
Dhule	Not Applicable	0.00	0.00	0.00	0.00	0.00	0.00
	Very Helpful	27.08	17.36	44.44	27.08	13.19	40.27
	Somewhat Helpful	21.53	17.36	38.89	21.53	13.19	34.72
	Not Helpful	11.11	5.56	16.67	11.11	2.78	13.89
Gadchiroli	Not Applicable	0.00	0.00	0.00	0.00	0.00	0.00
	Very Helpful	3.49	5.81	9.30	3.49	3.49	6.98
	Somewhat Helpful	29.07	9.30	38.37	29.07	16.28	45.35
	Not Helpful	48.84	3.49	52 33	48.84	3.49	52.33
Jalana	Not Applicable	0.00	0.00	0.00	0.00	0.00	0.00
	Very Helpful	21.98	9.89	31.87	21.98	9.89	31.87
	SomewhatHelpful	20.88	8.79	29.67	20.88	17.58	38.46
	Not Helpful	36.26	2.20	38.46	36.26	5.49	41.75

Table 5.26 : Percentage of Teachers for Schooling of Their Wards (Categorywise)

District	Type of School	Percentage of Teachers			
		SC	ST	OBC	Others
Beed	Govt. School	10.66	2.46	8.20	30.33
	Private Management Aided Schools	1.64	0.82	8.20	29.51
	Private Unaided Schools	0.00	0.00	0.82	4.92
	No Special Preference	0.00	0.00	0.00	0.82
Dhule	Govt. School	11.81	13.19	32.64	18.75
	Private Management Aided Schools	2.08	2.78	6.94	6.94
	Private Unaided Schools	0.69	0.00	1.39	2.08
	No Special Preference	0.00	0.00	0.69	0.00
Gadchiroli	Govt. School	10.47	33.72	33.72	2.33
	Private Management Aided Schools	3.49	0.00	11.63	4.65
	Private Unaided Schools	0.00	0.00	0.00	0.00
	No Special Preference	0.00	0.00	0.00	0.00
Jalana	Govt. School	10.99	4.40	10.99	35.16
	Private Management Aided Schools	4.40	0.00	4.40	23.08
	Private Unaided Schools	0.00	0.00	0.00	1.10
	No Special Preference	0.00	0.00	2.20	3.30

Table 5.23 , Table 5.24 and Table 5.25 describe the help received by teachers from head teachers , BEO and primary school teachers. It is observed that teachers find head teachers , BEO and primary school teachers very helpful or some what helpful in all the four districts. But a fairly large percentage of teachers reports that they are not helpful. This percentage is very high in Gadchiroli and Jalana districts.

Teachers preferred Government schools for the schooling of their wards (Table 5.26).

Head Teachers

Table 5.27 Percentage Distribution of Head Teachers in Sampled Schools (Genderwise & Categorywise)

District	Genderwise		Categorywise			
	Male	Female	SC	ST	OBC	Other
Beed	93.33	6.67	22.22	75.56	2.22	0.00
Dhule	77.78	22.22	31.11	66.67	2.22	0.00
Gadchiroli	93.33	6.67	8.89	91.11	0.00	0.00
Jalana	95.56	4.44	33.33	66.67	0.00	0.00

Genderwise and Categorywise distribution of head Teachers reveals that a very high percentage of Head Tteachers are males showing a gender bias in favour of male Head Teachers in all the four districts (Table 5.27). Interestingly, most of them belonged to SC and ST categories. Percentage of Head Teachers belonging to ST category is the highest in all the four districts.

Table 5.28 : Percentage of Head Teacher's Involvement in Teaching Related Activities

Activities	By	District			
		Beed	Dhule	Gadchiroli	Jalana
Checking Diaries /Class Notes ofTeacher Every Week	Head Teacher	77.78	95.56	46.67	35.56
	BEO	0.00	4.44	2.22	0.00
Preparing Monthly Tests	Head Teacher	97.78	91.11	71.11	37.78
	BEO	0.00	6.67	2.22	2.22
Evaluation results of Monthly Tests	Head Teacher	100	84.44	73.33	37.78
	BEO	2.22	28.89	4.44	2.22
Observation of Classroom Teaching & Suggesting Improvements	Head Teacher	82.22	88.89	48.89	37.78
	BEO	22.22	42.22	17.78	6.67
Checking Pupils'Homework	Head Teacher	97.78	80.00	91.11	40.00
	BEO	0.00	0.00	0.00	0.00
Taking a Decision on Pupil'sPromotion	Head Teacher	95.56	91.11	97.78	37.78
	BEO	2.22	22.22	2.22	6.67
Holding Model Classes To Assist the Teachers	Head Teacher	13.33	60.00	20.00	26.67
	BEO	75.56	48.89	24.44	11.11

The sampled Head Teachers in all the four districts are found very much involved in teaching related activities (Table 5.28, Table 5.30) such as checking diaries, preparing monthly tests, results of monthly tests, classroom observation, checking pupil's homework, pupil's promotions and holding model classes.

There are districtwise variations. In Gadchiroli and Jalana the percentage of Head Teachers' involvement in these activities is less as compared to Beed and Dhule districts.

Table 5.29 : Methods Used for Evaluation of Teachers by Head Teachers

District	Methods of Evaluation	Option I (I)	Option II (I)
Beed	Observation of Classes	46.67	2.22
	Performance of Students in Tests and Examinations	26.67	31.11
	Checking Class Notes Prepared by Teachers	6.67	31.11
	Reviewing Homework of Students	2.22	22.22
	Any Other	0.00	0.00
Dhule	Observation of Classes	51.11	2.22
	Performance of Students in Tests and Examinations	24.44	31.11
	Checking Class Notes Prepared by Teachers	4.44	31.11
	Reviewing Homework of Students	0.00	31.11
	Any Other	0.00	0.00
Gadchiroli	Observation of Classes	31.11	8.89
	Performance of Students in Tests and Examinations	24.44	24.44
	Checking Class Notes Prepared by Teachers	6.67	13.33
	Reviewing Homework of Students	4.44	22.22
	Any Other	0.00	6.67
Jalana	Observation of Classes	42.22	2.22
	Performance of Students in Tests and Examinations	26.67	26.67
	Checking Class Notes Prepared by Teachers	13.33	24.44
	Reviewing Homework of Students	0.00	28.89
	Any Other	0.00	2.22

Table 5.29 describes two preferences given to the five methods used for evaluation of teachers by Head teachers. Observation of classes and performance of students in tests and examinations are the two methods used by the head teachers to evaluate teachers. Checking Class Notes prepared by teachers and reviewing home work of students are given second preference. This indicates lack of feedback given to students on their performance. Attention of head teachers needs to be drawn towards these aspects.

Table 5.30 : Prioritising of Perceptions of Head Teachers in School Performance

District	Factors	Option I (T)	Option II (T)
Beed	Attitude and Commitment of Teachers	20.00	10.00
	Attitude and Co-operation of Parents	9.00	12.00
	Motivation of Students	9.00	15.00
	Ability and Motivation of Head Teacher	5.00	8.00
	Assistance of BEO/ ADEIS	2.00	0.00
Dhule	Attitude and Commitment of Teachers	8.00	18.00
	Attitude and Co-operation of Parents	7.00	10.00
	Motivation of Students	22.00	8.00
	Ability and Motivation of Head Teacher	7.00	6.00
	Assistance of BEO/ ADEIS	1.00	3.00
Gadchiroli	Attitude and Commitment of Teachers	20.00	13.00
	Attitude and Co-operation of Parents	13.00	6.00
	Motivation of Student	7.00	14.00
	Ability and Motivation of Head Teacher	3.00	10 00
	Assistance of BEO/ ADEIS	0.00	1.00
Jalana	Attitude and Commitment of Teachers	5.00	7.00
	Attitude and Cooperation of Parents	5.00	2.00
	Motivation of Students	5.00	5.00
	Ability and Motivation of Head Teacher	3.00	4.00
	Assistance of BEO/ ADEIS	0.00	0.00

The sampled Head Teachers gave their perception giving ranks or preferences or options to factors responsible for school performance (Table 5.30). They expressed that it was the attitude and commitment of teachers , followed by motivation of students and parent's cooperation . This varied from district to district.

Head teachers in Beed (20 out of 45) and Gadchiroli (20 out of 45) perceived Attitude and Commitment of Teachers as most responsible factor for school performance, whereas the teachers in Dhule (22 out of 45) district gave importance to motivation of students followed by an attitude and cooperation of parents (13 out of 45). Programmes to motivate students to learn and parents to cooperate and take active interest in education of the child need to be developed in Dhule district.

Teachers in general and particularly in Beed and Gadchiroli districts need to be motivated to develop a positive attitude towards their important role in teaching and learning process. Almost all sampled head teachers did not hold BEO / ADEIS responsible for school performance.

Only 5 out of 45 head teachers in Jalana district could respond to this item . They also reported their perception in the same fashion . This needs further investigation.

Table 5.31 : Percentage of Head Teachers ' Involvement in School Related Activities

District	School Activities	Total
Beed	Drawing up Time-Table for Classes	100.00
	Assigning Teachers to Different Classes	84.44
	Deciding On Expenditure in Instructional Aids	71.11
	Appointing Teachers to the School	8.89
	Dismissing / Transferring Teachers from the School	4.44
	Evaluating Teachers' Performance	82.22
	Establishing Standards for Students' Promotion	93.33
	Establishing Homework Policies	97.78
	Adapting Syllabus to Local Conditions	11.11
	Getting Extra Funds For the School	40.00
Dhule	Drawing up Time-Table for Classes	97.78
	Asssigning Teachers to Different Classes	82.22
	Deciding On Expenditure in Instructional Aids	88.89
	Appointing Teachers to the School	8.89
	Dismissing / Transferring Teachers from the School	4.44
	Evaluating Teachers' Performance	82.22
	Establishing Standards for Students' Promotion	91.11
	Establishing Homework Policies	88.89
	Adapting Syllabus to Local Conditions	28.89
	Getting Extra Funds For the School	60.00
Gadchiroli	Drawing up Time-Table for Classes	100.00
	Assigning Teachers to Different Classes	50.00
	Deciding On Expenditure in Instructional Aids	86.36
	Appointing Teachers to the School	0.00
	Dismissing / Transferring Teachers from the School	2.27
	Evaluating Teachers' Performance	56.82
	Establishing Standards for Students' Promotion	100.00
	Establishing Homework Policies	97.73
	Adapting Syllabus to Local Conditions	27.27
	Getting Extra Funds For the School	72.73
Jalana	Drawing up Time-Table for Classes	100.00
	Assigning Teachers to Different Classes	72.22
	Deciding On Expenditure in Instructional Aids	72.22
	Appointing Teachers to the School	0.00
	Dismissing / Transferring Teachers from the School	0.00
	Evaluating Teachers' Performance	0.00
	Establishing Standards for Students' Promotion	0.00
	Establishing Homework Policies	0.00
	Adapting Syllabus to Local Conditions	0.00
	Getting Extra Funds For the School	44.44

Table 5.32 : Percentage of Head Teachers Authorised to Sanction Expenditure

Description	Districts Beed	Dhule	Gadchiroli	Jalana
Head Teacher to Spend on Behalf of School	17.78	51.11	77.27	55.56

The Table 5.32 reveals that a small percentage of head teachers in Beed (17.78%) are authorised to sanction expenditure. This requires further study. It is the highest in Gadchiroli district (77%).

Table 5.33 : Days Spent by the Head Teacher on Non-Academic Activities

Activity	Districts Beed	Dhule	Gadchiroli	Jalana
General Administration	16.73	3.13	1.91	17.06
Block Level Meeting	0.82	1.47	1.25	1.06
Public Function	0.18	0.36	0.11	0.06
Other Activities	2.07	2.51	1.75	4.00
Average Total Days Spent	19.78	7.47	5.02	22.17

Table 5.33 reveals that the Head Teachers spend their most of the time on administrative duties followed by other activities. This needs proper planning in time management and different tasks and responsibilities assigned to Head Teachers.

☐

CHAPTER 6

THE DROPOUTS

The information collected and presented here in this chapter is based on the data gathered about dropouts through Student Dropout Schedule (SD). Home background of dropouts, reasons given for being a dropout, their nutritional and health status, Learning Achievement and Educational Aspirations are discussed in 32 Tables in this chapter.

The study intended to cover about 900 droupouts . But a total number of 281 dropouts were studied in the four districts. This comes to 31.22% which is a small number as compared to the overall size of the sample for the following reasons reported by field investigators and supervisors.

1. Schools could not provide the necessary information about dropouts in the village.
2. Identified dropouts were not located at the given addresses.
3. Migration of dropouts with their parents.
4. Dropouts busy with their own work (household or Outside home) .
5. Actual dropouts remained on the roll .

The findings based on the information collected from 281 dropouts do indicate certain trends which will enable the planners to plan meaningful programmes for them.

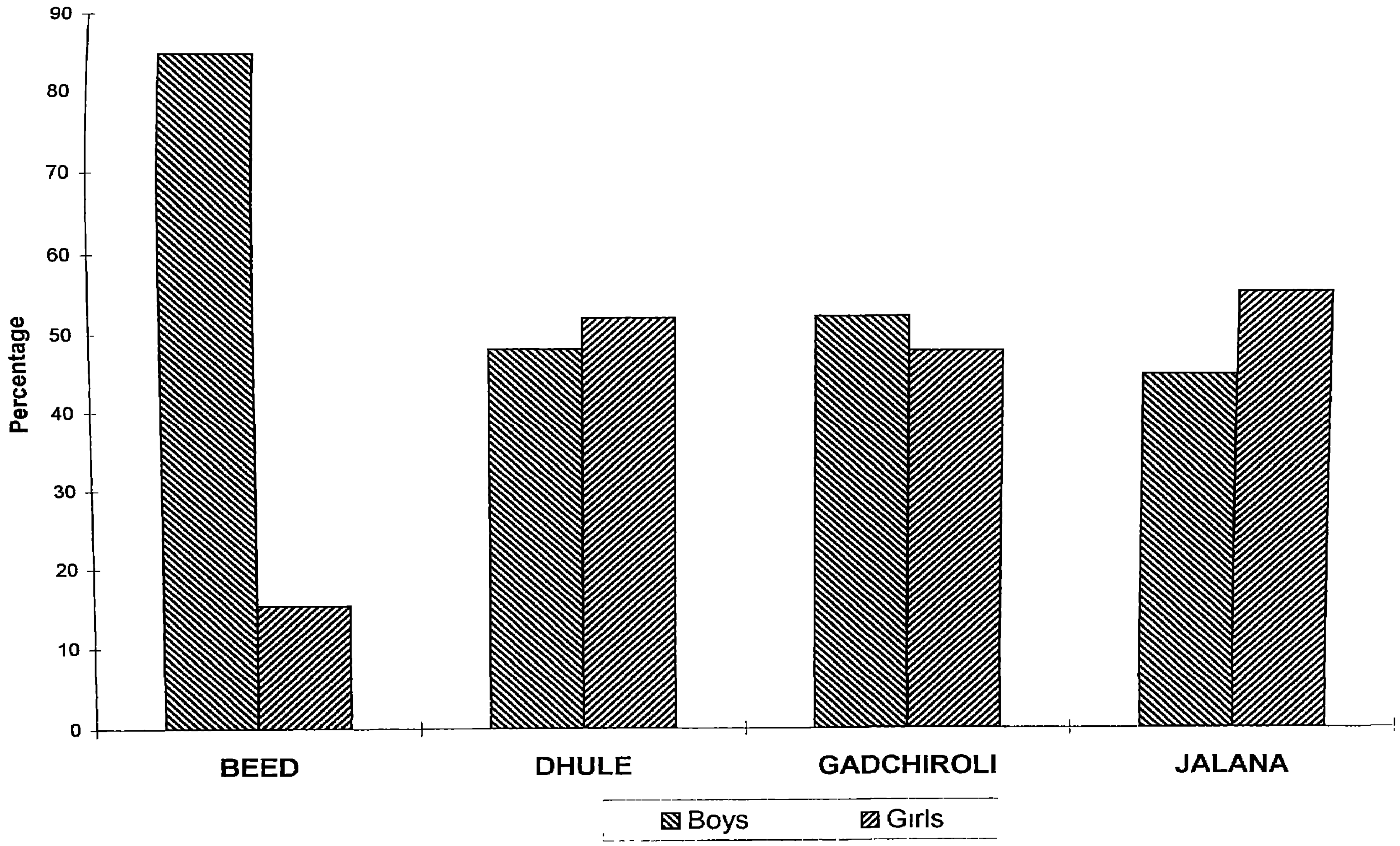
Gender , Area & Category

Table 6.1 indicates that the percentage of girls dropouts is slightly more than boys in Dhule and Jalana districts , while it is least in Beed (15.38%) district (Figure 6.1) . Dhule and Jalana districts show that there is more likelihood of girls dropping out than boys, even though fewer girls are enrolling in primary schools .

Table 6.1 : Percentage Distribution of Dropouts (Genderwise)

District	Boys	Girls	Total
Beed	84.62	15.38	100
Dhule	48.03	51.97	100
Gadchiroli	52.17	47.83	100
Jalana	44.78	55.22	100

Percentage distribution of dropouts from rural areas was much higher than the percentage of dropouts in urban areas almost in all districts . It is the highest in Beed (94.87%) district followed by Dhule (82.89%) district (Figure 6.2).


90
80
70
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50
40
30
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Percentage
BEED
DHULE
GADCHIROLI
JALANA
▧ Boys
▨ Girls

Table 6.2 : Percentage Distribution of Dropouts (Areawise)

District	Rural	Urban	Total
Beed	94.87	5.13	100
Dhule	82.89	17.11	100
Gadchiroli	78.26	21.74	100
Jalana	82.09	17.91	100

Categorywise distribution shows that there is a greater percentage of dropouts belonging to ST and OBC categories in Dhule and Gadchiroli districts which have tribal population, whereas reverse is the case in Beed and Jalana - non-tribal districts (Table 6.3 and Figure 6.3) . This clearly suggests the need for planning group specific and area specific strategies to retain pupils from various groups within a school.

Table 6.3 : Percentage Distribution of Dropouts (Categorywise)

District	SC	ST	OBC	Others
Beed	20.51	20.51	5.13	53.85
Dhule	5.92	73.68	11.84	8.55
Gadchiroli	8.70	47.83	43.48	0.00
Jalana	17.91	1.49	2.99	77.61

Table 6.4 : Percentage Distribution of Dropouts(Agewise)

	Districts			
Age	Beed	Dhule	Gadchiroli	Jalana
Under 10 Years	69.23	28.29	30.43	37.31
10-12 Years	25.64	59.87	47.83	56.72
Over 12 Years	5.13	11.84	21.74	5.97

The agewise distribution of dropouts indicates that 11.84% dropouts in Dhule, 21.74% in Gadchiroli district were overage for Class IV (Table 6.4) . It was 5.13% and 5.97% in Beed and Jalana districts. Percentage of overage dropouts is the least in Beed district (5.13%). But it is rather surprising to note that 69.23% dropouts leave the school before reaching the age of 10 years.

Table 6.5 : Percentage of Dropouts on the Basis of Number of Detentions in School

	Districts			
Description	Beed	Dhule	Gadchiroli	Jalana
Never Detained	71.79	63.16	69.57	59.70
Detained Once	15.38	27.63	21.74	32.84
Detained Twice	5.13	5.26	4.35	1.49
Detained Thrice	5.13	0.66	4.35	0.00

Figure 6.2 : Percentage Distribution of Dropouts
(Areawise)

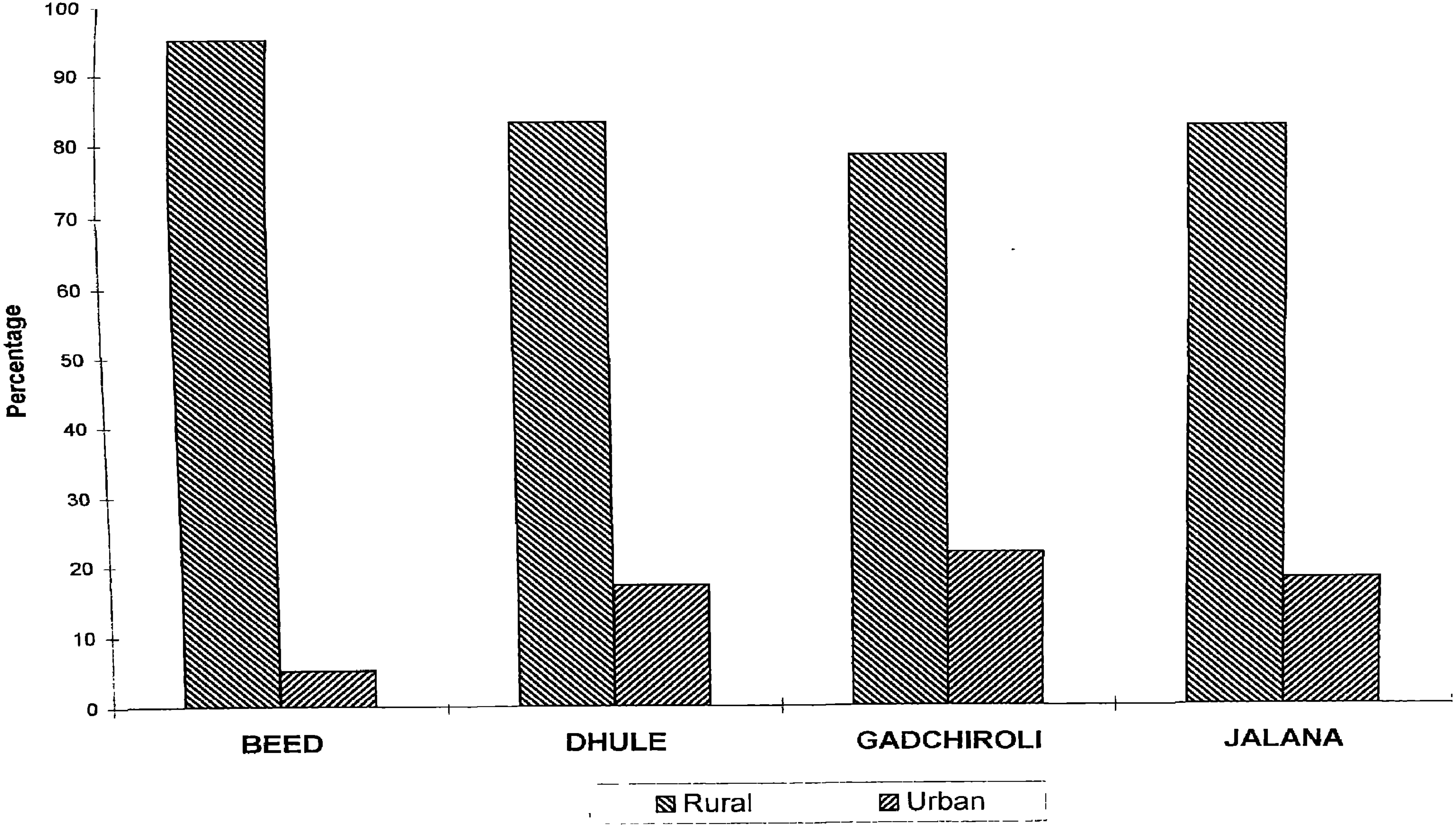


Figure 6.3 : Percentage Distribution of Dropouts
(Categorywise)

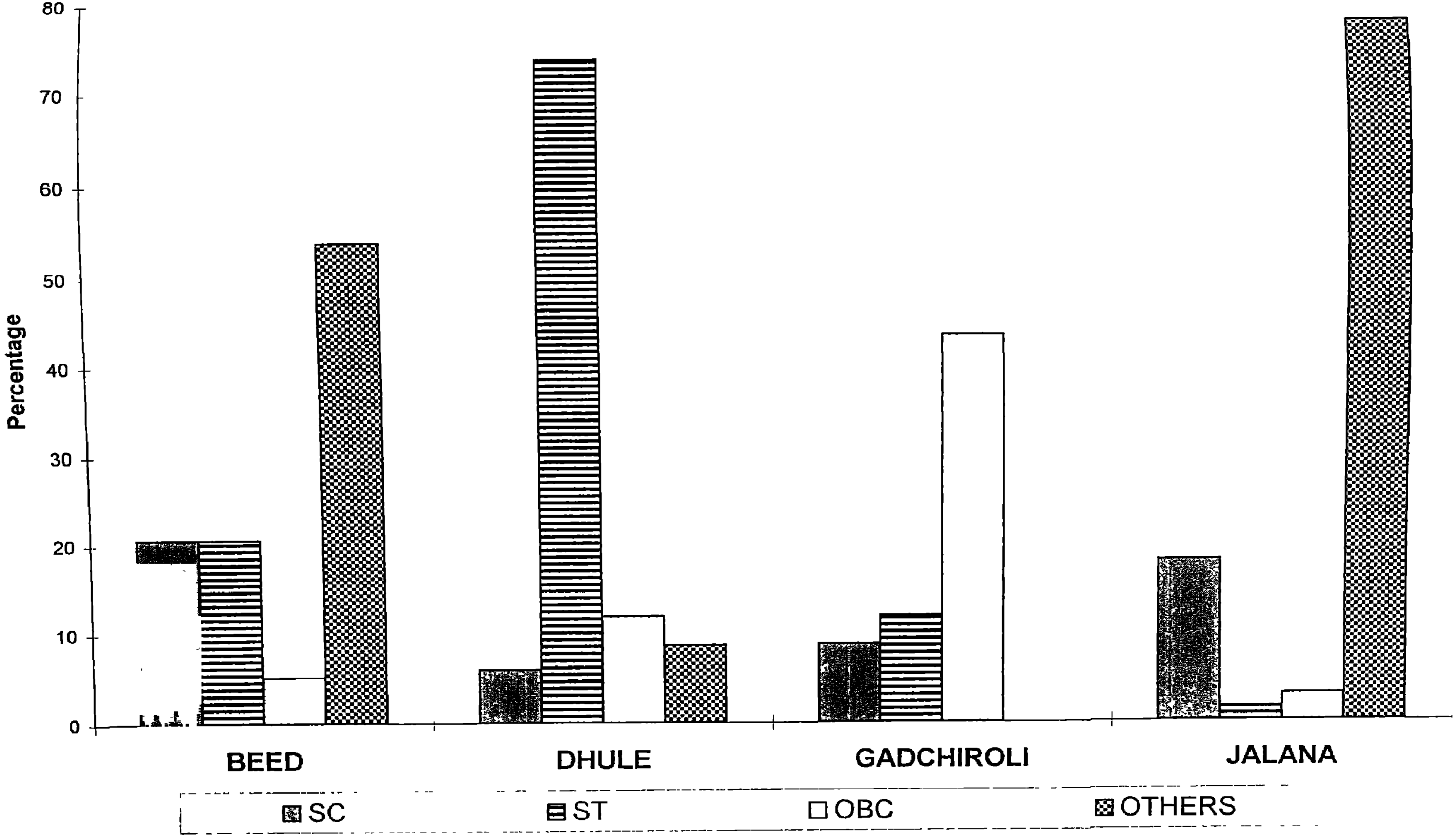


Table 6.6 : Percentage of Dropouts Repeating a Class (Genderwise)

District	Class	Boys	Girls	Total
Beed	I	38.46	0.00	35.71
	II	30.77	100	35.71
	III	23.08	0.00	21.43
	IV	7.69	0.00	7.14
	Total	22.41	1.85	12.50
Dhule	I	37.50	26.83	30.77
	II	33.33	21.95	26.15
	III	25.00	31.71	29.23
	IV	4.17	19.51	13.85
	Total	41.38	75.93	58.04
Gadchiroli	I	0.00	100	14.29
	II	16.67	0.00	14.29
	III	83.33	0.00	71.43
	IV	0.00	0.00	0.00
	Total	10.34	1.85	6.25
Jalana	I	26.67	27.27	26.92
	II	33.33	54.55	42.31
	III	33.33	9.09	23.08
	IV	6.67	9.09	7.69
	Total	25.86	20.37	23.21

Table 6.7 : Percentage Distribution of Dropouts According to Class Repetition

District	Class	Boys			Girls			Total		
		Once	Twice	Thrice	Once	Twice	Thrice	Once	Twice	Thrice
Beed	I	12.82	38.46	0.00	0.00	15.38	0.00	12.82	53.85	0.00
	II	10.26	33.33	0.00	2.56	12.82	0.00	12.82	46.15	0 00
	III	7.69	20.51	0.00	0.00	5.13	0.00	7.69	25.64	0.00
	IV	2.56	5.13	0.00	0.00	0.00	0.00	2.56	5.13	0.00
Dhule	I	5.92	42.11	0.00	7.24	44.74	0.00	13.16	86.84	0.00
	II	5.26	37.50	0.00	5.92	38.16	0.00	11.18	75.66	0.00
	III	3.95	24.34	0.00	8.55	30.26	0.00	12.50	54.61	0.00
	IV	0.66	12.50	0.00	5.26	15.13	0.00	5.92	27.63	0.00
Gadchiroli	I	0.00	34.78	0.00	4.35	43.48	0.00	4.35	78.26	0.00
	II	4.35	26.09	0.00	0.00	34.78	0.00	4.35	60.87	0.00
	III	21.74	4.35	0.00	0.00	17.39	0.00	21.74	21.74	0.00
	IV	0.00	4.35	0.00	0.00	4.35	0.00	0.00	8.70	0.00
Jalana	I	5.97	34.33	0.00	4.48	47.76	0.00	10.45	82.09	0.00
	II	7.46	32.84	0.00	8.96	43.28	0.00	16.42	76.12	0.00
	III	7.46	17.91	0.00	1.49	28.36	0.00	8.96	46.27	0.00
	IV	1.49	5.97	0.00	1.49	8.96	0.00	2.99	14.93	0.00

Table 6.5 , Table 6.6 & Table 6.7 revealed that a large percentage of dropouts were not detained. About 15 -32 % dropouts were detained once. Percentage of failures was found more in Jalana (32.84%), followed by Dhule (27.63%) , Gadchiroli (21.57%) and Beed (15.38% - Table 6.5).

Repetition of a class by girls dropouts in Dhule and Jalana is more (Table 6.6). Percentage of dropouts repeating a class twice is higher in all districts (Table 6.7).

Classwise percentage of dropouts is given in Table 6.8 . It is observed that most of the dropouts had at least three years of schooling . Table 6.8 shows that the enrolment percentage in Class IV is the least followed by Class II and Class III in Dhule district, whereas it is the highest in Dhule district (41%). An overall percentage in Class III is the highest, but there is a sudden fall in it in Class IV . But surprisingly it is exceptionally high in Dhule district (41.45 %).

Table 6.8 : Percentage Distribution of Dropouts on the Basis of Last Class Attended

Class	Districts			
	Beed	Dhule	Gadchiroli	Jalana
Class II	25.64	21.71	17.39	28.36
Class III	30.77	30.26	34.78	40.30
Class IV	15.38	41.45	26.09	25.37

Reasons For Being a Dropout

The dropouts were interviewed and information about the causes of their being a dropout was collected . Genderwise and Areawise analyses of those reasons are presented in Table 6.9 and 6.10 respectively.

Dropouts have to assist in **household work** is the main reason reported , irrespective of gender and area in all the four districts. **Parents do not want them to go to school** is also reported here as one of the reasons for being a dropout. **Finding studies too difficult** , **illness** and **Earning a living** are the other reasons for leaving the school reported by the dropouts at the time of their interview.

Gender disparities are seen in the reasons reported by the sampled dropouts . A greater percentage of boys dropouts from Beed (20.51%), Dhule (19.08%) district has reported **assisting in household work** as the main reason for leaving the school. Reverse is the situation in Gadchiroli and Jalana districts . Here the percentage of girls dropouts is greater as compared to percentage of boys dropouts in Beed and Dhule districts. There are other reasons , too .

This clearly indicates the lack of interest in education of their wards on the part of parents. Awareness regarding the need and importance of education needs to be created among the parents in these districts through well planned and properly organised programmes.

Percentage of dropouts reporting **Schools Too Far** is almost negligible. It means there are sufficient number of schools within the reach of the child. This is not the reason for being a dropout. Among all other causes **migration on large scale** along with their parents was observed as one of the prominent causes particularly in Dhule district.

Table 6.9 : Reasons For Being a Dropout (Genderwise)

District	Reasons	Boys	Girls	Total
Beed	1. Parents do not want	5.13	0.00	5.13
	2. Have to assist in household	20.51	10.26	30.77
	3. Will have to earn a living	0.00	2.56	2.56
	4. Training in household enterprise	0.00	0.00	0.00
	5. Studies too difficult/not interested	7.69	2.56	10.26
	6. Can 't afford textbooks/notebooks	2.56	0.00	2.56
	7. Illness / not keeping well	0.00	0.00	0.00
	8. Will Get Married	0.00	0.00	0.00
	9. Failure/ did not learn anything	0.00	0.00	0.00
	10 Teachers are not helpful	2.56	0.00	2.56
	11.Schools too far	2.56	0.00	2.56
	12.Others	43.59	0.00	43.59
Dhule	1. Parents do not want	6.58	5.92	12.50
	2. Have to assist in household	19.08	8.42	37.50
	3. Will have to earn a living	11.18	9.87	21.05
	4. Training in household enterprise	0.66	0.00	0.66
	5. Studies too difficult/not interested	1.32	3.29	4.61
	6. Can't afford textbooks/notebooks	0.66	1.32	1.97
	7. Illness / not keeping well	1.32	5.92	7.24
	8. Will Get Married	0.00	0.00	0.00
	9. Failure/did not learn anything	0.00	0.00	0.00
	10 Teachers are not helpful	0.00	0.66	0.66
	11. Schools too far	0.00	0.00	0.00
	12. Others	7.24	6.58	13.82
Gadchiroli	1. Parents do not want	4.35	4.35	8.70
	2. Have to assist in household	0.00	13.04	13.04
	3. Will have to earn a living	0.00	4.35	4.35
	4. Training in household enterprise	0.00	0.00	0.00
	5. Studies too difficult/not interested	13.04	0.00	13.04
	6. Can't afford textbooks/notebooks	4.35	0.00	4.35
	7. Illness / not keeping well	0.00	0.00	0.00
	8. Will Get Married	0.00	0.00	0.00
	9. Failure/ did not learn anything	0.00	0.00	0.00
	10 Teachers are not helpful	0.00	0.00	0.00
	11. Schools too far	0.00	0.00	0.00
	12. Others	21.74	13.04	34.78
Jalana	1. Parents do not want	7.46	1.49	8.95
	2. Have to assist in household	7.46	25.37	32.84
	3. Will have to earn a living	10.45	4.48	14.93
	4. Training in household enterprise	0.00	1.49	1.49
	5. Studies too difficult/not interested	2.99	2.99	5.98
	6. Can't afford textbooks/notebooks	1.49	1.49	2.97
	7. Illness / not keeping well	1.49	4.48	5.97
	8. Will Get Married	0.00	0.00	0.00
	9. Failure/ did not learn anything	2.99	1.49	4.48
	10 Teachers are not helpful	0.00	0.00	0.00
	11. Schools too far	0.00	1.49	1.49
	12. Others	10.45	10.45	20.90

Table 6.10 : Reasons For Being a Dropout (Areawise)

Reasons	Rural	Urban	Total
1. Parents do not want	5.13	0.00	5.13
2. Have to assist in household	30.77	0.00	30.77
3. Will have to earn a living	2.56	0.00	2.56
4. Training in household enterprise	0.00	0.00	0.00
5. Studies too difficult / not interested	7.69	2.56	10.26
6. Can not afford textbooks / notebooks	2.56	0.00	2.56
7. Illness / not keeping well	0.00	0.00	0.00
8. Will Get Married	0.00	0.00	0.00
9. Failure/ did not learn anything	0.00	0.00	0.00
10 Teachers are not helpful	2.56	0.00	2.56
11. Schools too far	2.56	0.00	2.56
12. Others	41.03	2.56	43.59
1. Parents do not want	10.53	1.97	12.50
2. Have to assist in household	29.61	7.89	37.50
3. Will have to earn a living	20.39	0.66	21.05
4. Training in household enterprise	0.66	0.00	0 66
5. Studies too difficult / not interested	3.95	0.66	4.61
6. Can not afford textbooks / notebooks	1.32	0.66	1.97
7. Illness / not keeping well	5.26	1.97	7.24
8. Will Get Married	0.00	0.00	0.00
9. Failure/ did not learn anything	0.00	0.00	0.00
10 Teachers are not helpful	0.00	0.66	0.66
11. Schools too far	0.00	0.00	0.00
12. Others	11.18	2.63	13.82
1. Parents do not want	4.35	4.35	8.70
2. Have to assist in household	13.04	0.00	13.04
3. Will have to earn a living	4.35	0.00	4.35
4. Training in household enterprise	0.00	0.00	0.00
5. Studies too difficult / not interested	4.35	8.70	13.04
6. Can not afford textbooks/notebooks	4.35	0.00	4.35
7. Illness / not keeping well	17.39	0.00	17.39
8. Will Get Married	0.00	0.00	0.00
9. Failure/ did not learn anything	0.00	0.00	0.00
10 Teachers are not helpful	0.00	0.00	0.00
11. Schools too far	0.00	0.00	0.00
12. Others	26.09	8.70	34.78
1. Parents do not want	8.96	0.00	8.96
2. Have to assist in household	28.36	4.48	32.84
3. Will have to earn a living	13.43	1.49	14.93
4. Training in household enterprise	1.49	0.00	1.49
5. Studies too difficult / not interested	4.48	1.49	5.97
6. Can not afford textbooks / notebooks	2.99	0.00	2.99
7. Illness / not keeping well	5.97	0.00	5.97
8. Will Get Married	0.00	0.00	0.00
9. Failure/ did not learn anything	2.99	1.49	4.48
10 Teachers are not helpful	0.00	0.00	0.00
11. Schools too far	1.49	0.00	1.49
12. Others	11.94	8.96	20.90

Table 6.11 : Educational Aspirations of Dropouts

District	Level	Boys	Girls	Total
Beed	1. Do not want to Study	41.03	2.56	43.59
	2. primary/ Middle	10.26	10.26	20.52
	3. Secondary	17.95	0.00	17.95
	4. Senior Secondary	7.69	0.00	7.69
	5. Graduation	2.56	0.00	2.56
Dhule	1. Do not want to Study	14.47	25.00	39.47
	2. primary/ Middle	9.21	3.95	13.16
	3. Secondary	13.82	13.16	26.97
	4. Senior Secondary	7.89	3.29	11.18
	5. Graduation	0.66	3.29	3.95
Gadchiroli	1. Do not want to Study	26.09	21.74	47.83
	2. primary/ Middle	0.00	13.04	13.04
	3. Secondary	0.00	13.04	13.04
	4. Senior Secondary	4.35	0.00	4.35
	5. Graduation	0.00	0.00	0.00
Jalana	1. Do not want to Study	20.90	25.37	46.27
	2. primary/ Middle	13.43	14.93	28.36
	3. Secondary	7.46	7.46	14.93
	4. Senior Secondary	0.00	2.99	2.99
	5. Graduation	1.49	1.49	2.98

Table 6.11 indicates that more than 40% dropouts do not want to study. The percentage of dropouts reporting **don't want to study** is found to be the highest in Gadchiroli (47.83%) and Jalana (46.27%) ,followed by Beed (43.59%) and Dhule (39.47%)districts.

Percentage of the sampled dropouts reporting higher educational aspirations is very low. It is found to be slightly better in Beed and Dhule districts. Only 2.56% dropouts from Beed desired to reach graduation level with 2.99% and 3.95% from Jalana and Dhule districts respectively. No one from Gadchiroli district aspired for reaching graduation level . Percentage of aspiring for reaching secondary level is the highest in Dhule (26.97%), followed by Beed (17.95%) , Jalana (14.93%) and Gadchiroli (13.04%) districts.

Table 6.12 : Percentage of Dropout Doing Paid Work

District	Percentage of Dropouts		
	Boys	Girls	Total
Beed	7.69	5.13	12.82
Dhule	8.55	13.16	21.71
Gadchiroli	4 4.35	4.35	8.70
Jalana	7.46	8.96	16.42

Table 6.12 gives the percentage of boys and girls dropouts who are doing some kind of paid work . Percentage of sampled dropouts is the highest in Dhule district (21.71%) followed by Jalana (16.42%), Beed (12.82%) and Gadchiroli (8.70%) .

Table 6.13 : Percentage of Dropouts in Different Occupation

District	Level	Boys	Girls	Total
Beed	1. Factory Work	0.00	0.00	0.00
	2. H.Hold / Indst/ Art Work	2.56	2.56	5.13
	3. Agricultural Work	7.69	5.13	12.82
	4. Services (Domestic / Shop)	0.00	2.56	2.56
	5. Others	74.36	2.56	76.92
Dhule	1. Factory Work	1.32	1.97	3.29
	2. H.Hold / Indst/ Art Work	1.97	0.66	2.63
	3. Agricultural Work	9.87	19.08	28.95
	4. Services (Domestic / Shop)	1.97	0.66	2.63
	5. Others	31.58	28.29	59.87
Gadchiroli	1. Factory Work	0.00	0.00	0.00
	2. H.Hold / Indst/ Art Work	0.00	0.00	0.00
	3. Agricultural Work	0.00	0.00	0.00
	4. Services (Domestic / Shop)	0.00	0.00	0.00
	5. Others	47.83	47.83	95.65
Jalana	1. Factory Work	1.49	0.00	1.49
	2. H.Hold / Indst/ Art Work	0.00	4.48	4.48
	3. Agricultural Work	8.96	10.45	19.40
	4. Services (Domestic / Shop)	0.00	1.49	1.49
	5. Others	34.33	38.81	73.13

It is seen from the Table 6.13 that the highest perentage of dropouts involved in Agricultural work is found in Dhule (29%) and Jalana (19%) districts, followed by Beed (12.82%) . No one from Gadchiroli district is reported to be involved in factory works, household work, agricultural work or services.

About 96 percent of the dropuouts are reported engaged in activities other than the listed in Table 6.13. A study in this regard would be very interesting.

Nutritional and Health Status of Dropouts

Table 6.14 , Table 6.15 , and Table 6.16 reveal the facts about the nutritional and health status of the dropouts. As the health of a child depends on the nutrition that the child receives, the data regarding food habits of dropouts are presented in Table 6.14.

On examining this data it is seen that more than 40% dropouts from all the four districts get three meals a day. It is rather surprising to note that more than 35% dropouts in Beed district never have meals daily . Nearly 40% dropouts do not have afternoon meals.

Similarly only 40 percent dropouts in Dhule district get the meals daily in the morning . Some scheme regarding food and nutrition needs to be introduced in these districts, as this might be one of the causes of dropouts.

Table 6.14 : Nutritional Status of Dropouts (Percentage)

District	Time	Percentage of Dropouts Who Had Meals Always	Sometimes	Never
Beed	Morning	64.10	0.00	35.90
	Afternoon	56.41	2.56	41.03
	Evening	64.10	0.00	35.90
Dhule	Morning	40.13	27.63	32.24
	Afternoon	52.17	30.43	13.04
	Evening	86.96	0.00	8.70
Gadchiroli	Morning	89.55	0.00	10.45
	Afternoon	52.17	30.43	13.04
	Evening	86.96	0.00	8.70
Jalana	Morning	89.55	0.00	10.45
	Afternoon	83.58	5.97	10.45
	Evening	89.55	0.00	10.45

Table 6.15 gives information regarding the percentage distribution of dropouts on the basis of physical impairment in all the four districts. The percentage in this regard is very small and almost negligible.

Table 6.15 : Percentage Distribution of Dropouts on the Basis of Physical Impairment

Impairment	Districts Beed	Dhule	Gadchiroli	Jalana
Vision	0	1	0	1
Hearing	1	3	0	0
Speech	1	2	0	0
Limbs	0	2	2	0

Fever seems to be the major illness in dropouts (Table 6.16). The highest number of dropouts with fever as an illness are reported from Dhule (9%) district followed by Beed (3%). Diarrhoea (3%) and Skin disease (4%) are the other illnesses in Dhule district . It is needed to implement the schemes of health and nutrition for school children specially in Dhule district.

Table 6.16 : Percentage Distribution of Dropouts on the Basis of Illness

Illness	Districts Beed	Dhule	Gadchiroli	Jalana
Fever	3	9	2	2
Asthma	0	3	0	0
Diarrhoea	1	3	0	0
Skin Disease	0	4	1	0

It is seen from Table 6.17 that the percentage of illiterate parents is quite high . It is the highest in Gadchiroli (61% to 87%) followed by Dhule district, where as it is the lowest in Beed district followed by Jalana district.

Table 6.17: Percentage Distribution of the Dropout on the Basis of Educational Level of Parent

	Districts							
	Beed		Dhule		Gadchiroli		Jalana	
Educational Level	Father	Mother	Father	Mother	Father	Mother	Father	Mother
Illiterate	25.64	46.15	60.53	86.84	65.22	86.96	46.27	77 61
Literate	0.00	5.13	2.63	0.00	0.00	0.00	7.46	1.49
Primary	10.26	0.00	7.24	3.29	13.04	0.00	11.94	2.99
Secondary	7.69	5.13	8.55	1.32	13.04	0.00	13.43	1.49
Hr. Secondary	0.00	0.00	1.32	0.66	0.00	0.00	1.49	0.00
College	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

The percentage of illiterate mothers is as high as 86.96 % in Gadchiroli district followed by Dhule district (86.84%). It is the lowest in Beed district (46.15%). No parents who have completed collegiate education are seen in none of the districts under study.

Table 6.18 : Percentage Distribution of the Dropout on the Basis of Occupational Status of Parents

	Districts							
	Beed		Dhule		Gadchiroli			Jalana
Occupation	Father	Mother	Father	Mother	Father	Mother	Father	Mother
Household / Housewife	0.00	28.21	0.66	34.21	0.00	52.17	0.00	14.93
Farmer	17.95	2.56	21.05	1.97	60.87	4.35	47.76	43.28
Poultry Farming	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural Labour	23.08	17.95	45.39	57.24	13.04	26.09	16.42	19.40
Picking Forest Produce	0.00	0.00	1.32	1.32	4.35	4.35	0.00	0.00
Domestic Servant	2.56	0.00	0.00	0.66	0.00	4.35	1.49	0.00
Street Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manual Unskilled Worker	5.13	0.00	7.89	1.32	4.35	4.35	8.96	2.99
Skilled Worker	0.00	0.00	1.32	0.00	0.00	0.00	0.00	0.00
Clerical Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Self-employment	5.13	0.00	4.61	0.00	0.00	0.00	0.00	0.00
Employer	2.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manager/ Senior Officer	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Others	43.59	51.28	17.76	3.29	17.39	4.35	25.37	19.40

Table 6.18 reveals the percentage of the parents of the dropouts on the basis of their occupational status. The parents have taken agricultural labour as their main occupation . The percentage of agricultural labour is the highest in Dhule district (Fathers : 45.39% ; Mothers : 57.25 %), whereas it is the least in Gadchiroli district (Father : 13.04%) .

It is observed that Farming is the main occupation of the parents in Gadchiroli and Jalana districts. Percentages of parents working as domestic servants, street vendors, skilled workers, clerical worker, self employment , employees, and managers/senior officers are almost zero.

The percentage of parents working as manual unskilled workers ranges from 4.35% (Gadchiroli) to 8.96% (Jalana) in case of fathers while in case of mothers it is ranging from 0.00 % (Beed) to 1.32% (Dhule).

Table 6.19 : Head of the Family of Dropouts

Relationship	Districts Beed	Dhule	Gadchiroli	Jalana
Father	92.31	94.74	91.30	89.55
Mother	7.69	3.95	4.35	5.97
Brother/ Sisters	0.00	0.66	0.00	1.49
Other Member	0.00	0.66	4.35	2.99

It is clear from Table 6.19 that almost all families of dropouts are mainly headed by fathers. Mothers are playing their traditional subordinate role of household work.

Learning Achievement of Dropouts

A. Language

Table 6.20 displays the Means and SDs of the scores achieved by dropouts on the Literacy test. Dropouts from Jalana have the largest Mean (9.51) and those from Gadchiroli have the lowest Mean (4.36).

There were marked differences in the performance of boys and girls in Beed district only. There were no differences found in the learning achievement of boys and girls in case of literacy skills.

Table 6.20 : Mean Achievement of Dropouts in Literacy (Genderwise)

Districts	Boys		Girls		Total		Significance
	Mean	SD	Mean	SD	Mean	SD	
Beed	3.03	3.15	5.17	1.07	8.20	4.21	3.05
Dhule	3.38	2.72	3.90	2.30	7.28	5.02	1.26
Gadchiroli	2.00	2.61	2.36	2.71	4.36	5.32	0.33
Jalana	4.43	2.72	5.08	2.35	9.51	5.07	1.03

Table 6.21 : Mean Achievement of Dropouts in Literacy (Areawise)

Districts	Rural		Urban		Total		
	Mean	SD	Mean	SD	Mean	SD	Significance
Beed	3.35	3.00	3.50	3.50	6.85	6.50	0.06
Dhule	3.50	2.53	4.38	2.35	7.88	4.89	1.72
Gadchiroli	2.28	2.76	1.80	2.23	4.08	4.99	0.40
Jalana	4.76	2.45	4.92	2.93	9.68	5.38	0.17

Areawise , no differences were observed in the achievement of literacy skills of dropouts (Table 6.21) . However , dropouts in OBC and Others category showed a better performance in literacy skills (Table 6.22 & Table 6.23). Dropouts from SC and ST category scored low. This reflects on poor teaching in lower classes.

Table 6.22 : Mean Achievement of Dropouts in Literacy (Categorywise)

Districts	SC		ST		OBC		Others	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Beed	4.00	2.55	0.50	1.32	5.50	1.50	4.00	3.09
Dhule	2.22	2.53	3.66	2.54	4.61	1.95	3.23	2.49
Gadchiroli	2.50	2.50	1.45	2.15	3.63	2.91	0.00	0.00
Jalana	6.58	0.76	5.00	0.00	7.00	0.00	4.29	2.65

Table 6.23 : Comparison of Achievement Of Dropouts in Literacy (Categorywise)

District	SC & ST	SC & OBC	SC & Others	ST & OBC	ST & Others	OBC & Others
Beed	3.45	1.08	1.33	4.31	1.57	0.62
Dhule	1.64	2.49	2.19	1.83	0.68	1.85
Gdchiroli	0.56	0.55	0.64	1.78	2.25	3.52
Jalana	7.22	1.90	0.97	0.00	0.38	1.45

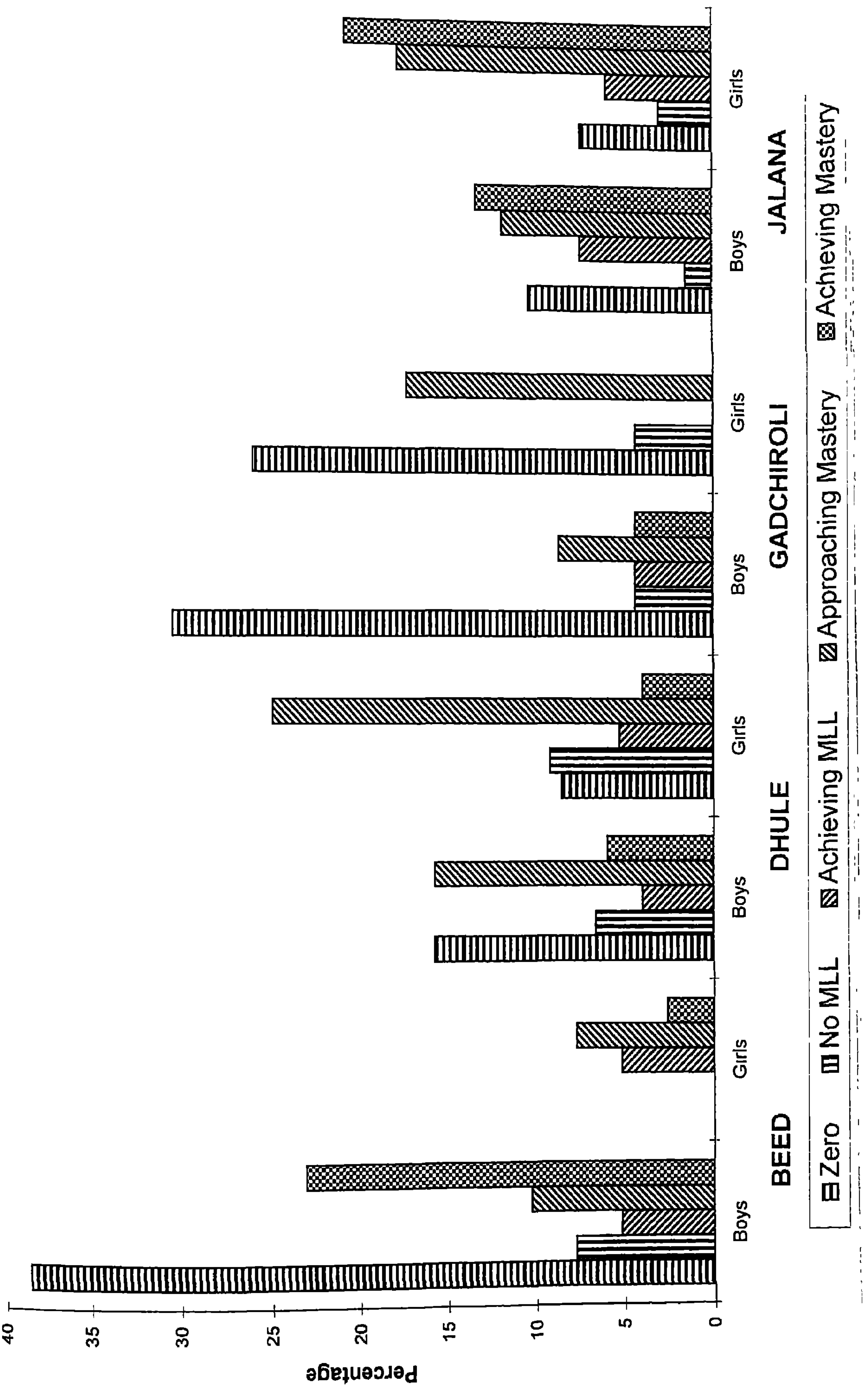
	Districts											
	Beed			Dhule			Gadchiroli			Jalana		
Levels	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Zero	38.46	0.00	38.46	15.79	8.55	24.34	30.43	26.09	56.52	10.45	7.46	17.91
No MLL	7.69	0.00	7.69	6.58	9.21	15.79	4.35	4.35	8.70	1.49	2.99	4.48
Achieving MLL	5.13	5.13	10.26	3.95	5.26	9.21	4.35	0.00	4.35	7.46	5.97	13.43
Approaching Mastery	10.26	7.69	17.95	15.79	25.00	40.79	8.70	17.39	26.09	11.94	17.91	29.85
Achieving Mastery	23.08	2.56	25.64	5.92	3.95	9.87	4.35	0.00	4.35	13.43	20.90	34.33

Table 6.25 : Percentage of Dropouts on Different Levels of Achievement in Literacy (Areawise)

	Districts											
Levels	Beed			Dhule			Gadchiroli			Jalana		
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Zero	35.90	2.56	38.46	21.71	2.63	24.34	43.48	13.04	56.52	13.43	4.48	17.91
No MLL	7.69	0.00	7.69	14.47	1.32	15.79	8.70	0.00	8.70	4.48	0.00	4.48
Achieving MLL	10.26	0.00	10.26	5.92	3.29	9.21	0.00	4.35	4.35	13.43	0.00	13.43
Approaching Mastery	17.95	0.00	17.95	33.55	7.24	40.79	21.74	4.35	26.09	23.88	5.97	29.85
Achieving Mastery	23.08	2.56	25.64	7.24	2.63	9.87	4.35	0.00	4.35	26.87	7.46	34.33

Table 6.26 : Percentage of Dropouts on Different Levels of Achievement in Literacy (Categorywise)

	Districts															
Levels	Beed				Dhule				Gadchiroli				Jalana			
	SC	ST	OBC	Others	SC	ST	OBC	Others	SC	ST	OBC	Others	SC	ST	OBC	Others
Zero	2.56	17.95	0.00	17.95	0.66	4.61	0.00	4.61	4.35	30.43	0.00	30.43	1.49	10.45	0.00	10.45
No MLL	5.13	0.00	0.00	2.56	1.32	0.00	0.00	0.66	8.70	0.00	0.00	4.35	2.99	0.00	0.00	1.49
Achieving MLL	2.56	2.56	2.56	2.56	0.66	0.66	0.66	0.66	4.35	4.35	4.35	4.35	1.49	1.49	1.49	1.49
Approaching Mastery	5.13	0.00	0.00	12.82	1.32	0.00	0.00	3.29	8.70	0.00	0.00	21.74	2.99	0.00	0.00	7.46
Achieving Mastery	5.13	0.00	2.56	17.95	1.32	0.00	0.66	4.61	8.70	0.00	4.35	30.43	2.99	0.00	1.49	10.45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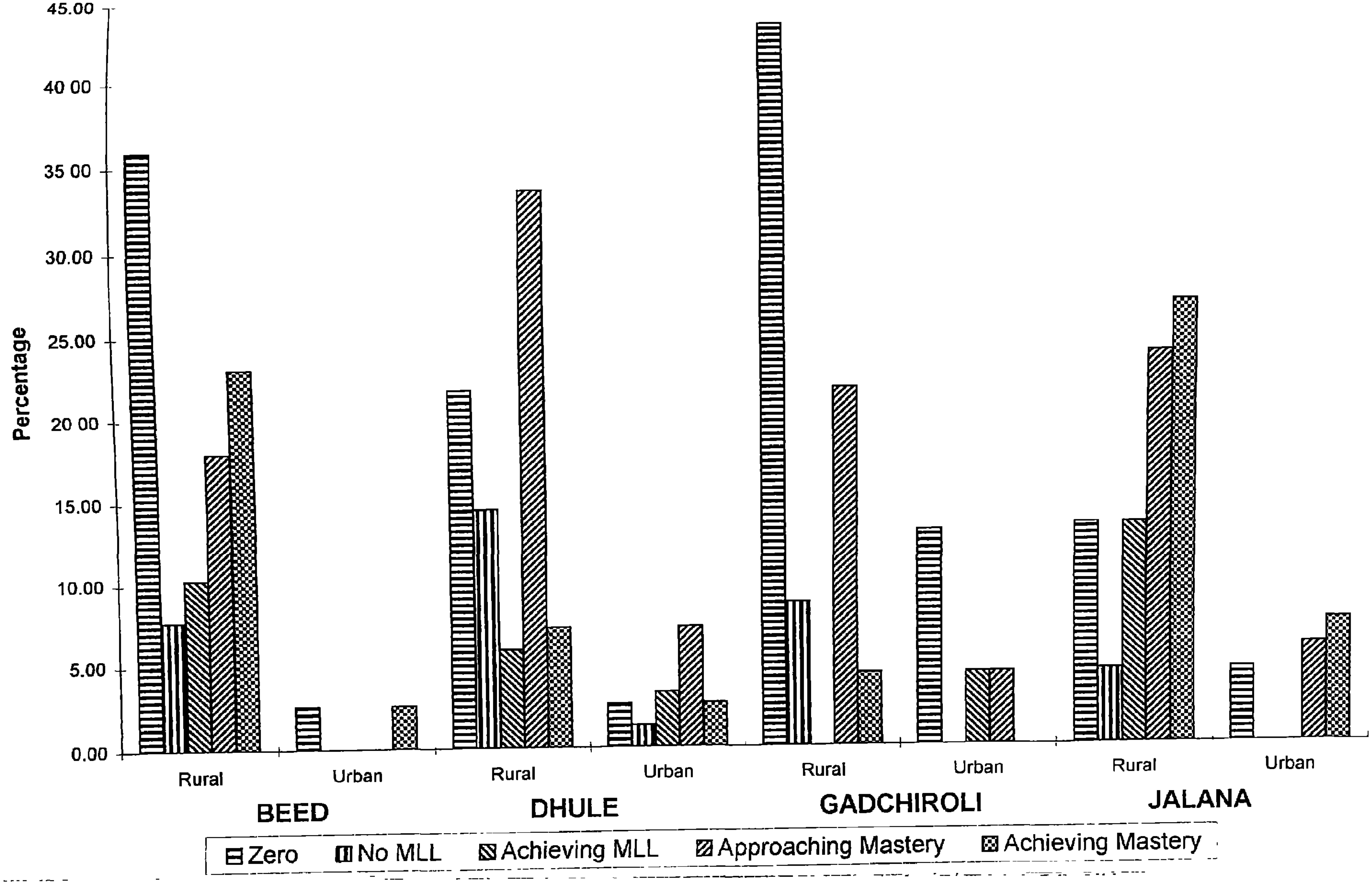
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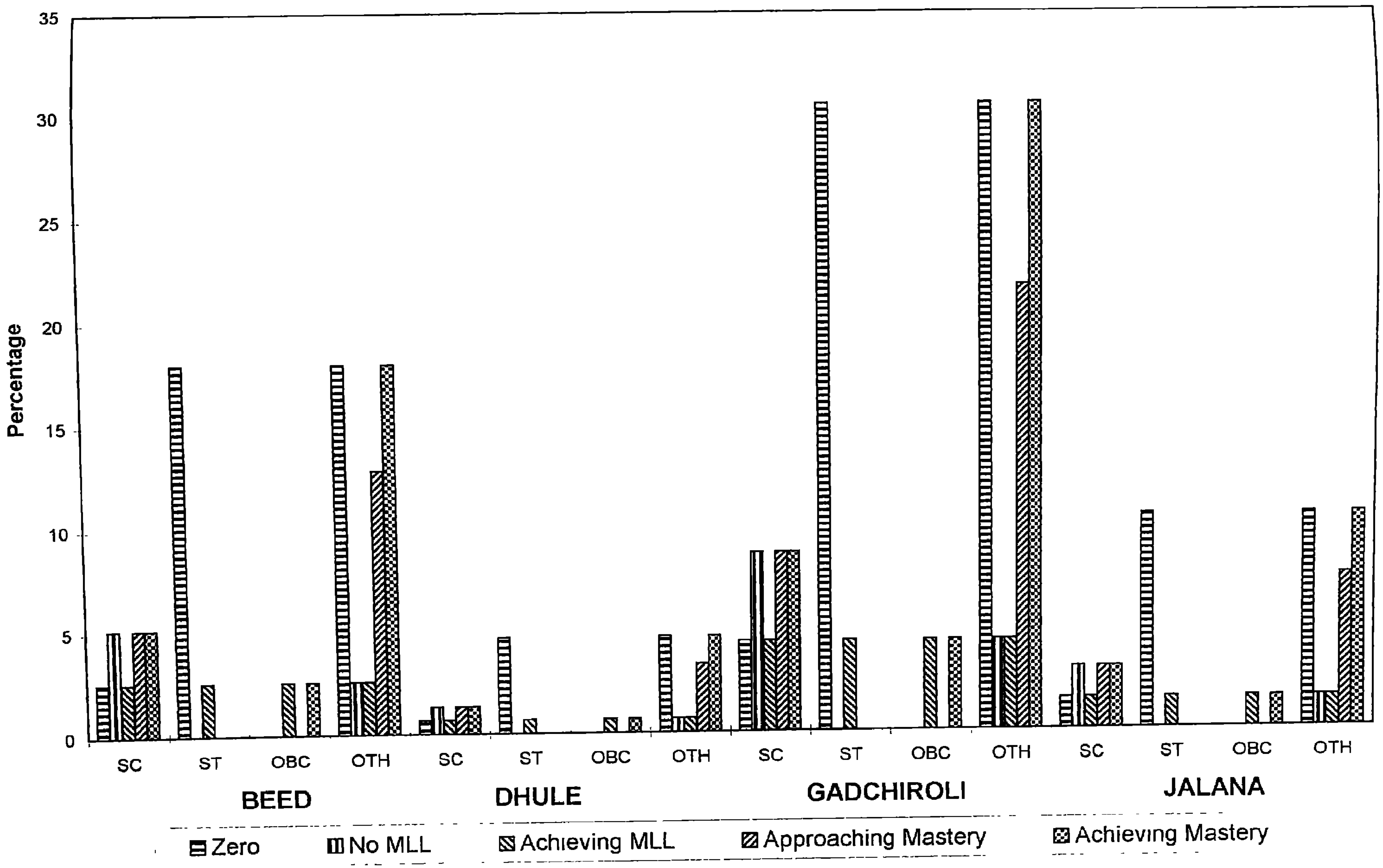
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B. Mathematics

The mean achievement scores of dropouts in numeracy test are still lower than in literacy skills. Dropouts from Jalana district scored the highest (Mean=5.52) , whereas dropouts from Gadchiroli had the lowest mean score in Numeracy test (Table 6.27).

Boys and girls from Dhule , Gadchiroli and Jalana did not show any differences in Numeracy skills, while dropout girls in Beed district performed better than boys and girls in other three districts in Numeracy skills .

Table 6.27 : Mean Achievement of Dropouts in Numeracy (Genderwise)

Districts	Boys		Girls		Total		Significance
	Mean	SD	Mean	SD	Mean	SD	
Beed	1.85	2.08	3.17	1.57	5.02	3.65	1.79
Dhule	2.56	1.75	2.23	1.36	4.79	3.11	1.31
Gadchiroli	1.75	1.83	1.55	1.97	3.30	3.80	0.26
Jalana	2.73	1.61	2.78	1.61	5.52	3.22	0.13

Dropouts in rural and urban areas did not show any differences on numeracy test (Table 6.28) .

Table 6.28 : Mean Achievement of Dropouts in Numeracy (Areawise)

Districts	Rural		Urban		Total		Significance
	Mean	SD	Mean	SD	Mean	SD	
Beed	2.05	2.07	2.00	2.00	4.05	4.07	0.04
Dhule	2.30	1.57	2.81	1.49	5.11	3.06	1.56
Gadchiroli	1.72	1.94	1.40	1.74	3.12	3.68	0.36
Jalana	2.73	1.55	2.92	1.85	5.64	3.40	0.33

Table 6.29 : Mean Achievement of Dropouts in Numeracy (Categorywise)

Districts	SC		ST		OBC		Others	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Beed	3.75	1.56	0.13	0.33	1.50	1.50	2.19	2.04
Dhule	1.11	1.20	2.43	1.47	3.06	1.93	2.00	1.41
Gadchiroli	2.00	2.00	1.09	1.83	2.63	1.73	0.50	0.50
Jalana	3.25	0.72	2.00	0.00	3.50	0.50	2.63	1.77

Table 6.30 : Comparison of Achievement of Dropouts in Numeracy (Categorywise)

District	SC & ST	SC & OBC	SC & Others	ST & OBC	ST & Others	OBC & Others
Beed	6.42	1.88	3.17	1.29	1.43	0.39
Dhule	3.12	3.22	3.48	1.32	1.19	1.87
Gadchiroli	0.60	0.41	0.43	1.86	1.02	3.34
Jalana	6.00	0.61	0.78	4.24	0.51	0.67

Dropouts from SC Category performed very poorly in numeracy (Table 6.29 & Table 6.30) . Dropouts from OBC and Others category performed slightly better than SC & ST .

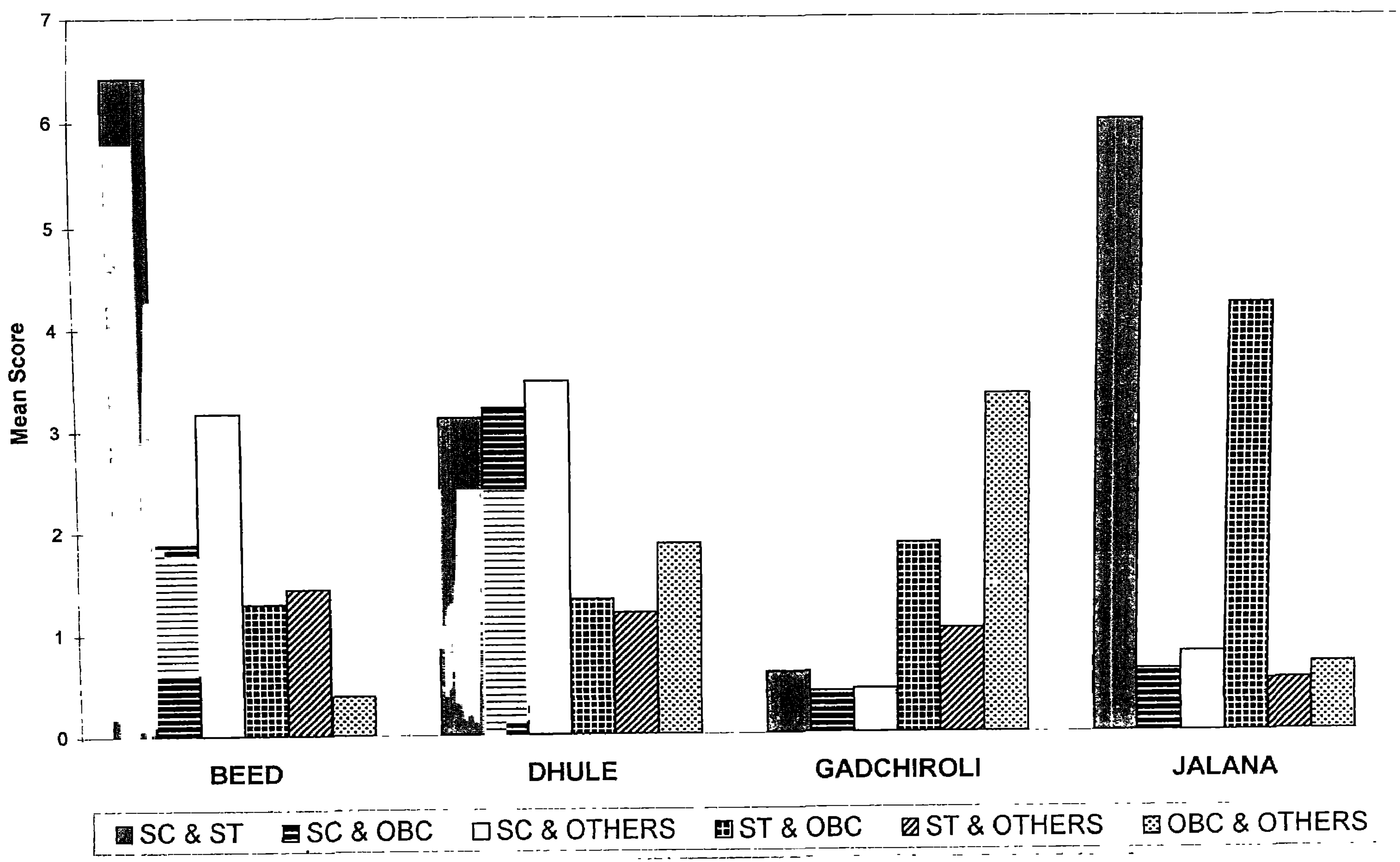
Achievement Levels

Percentage distribution of dropouts on different levels of achievement in Numeracy , namely, Zero level; No MLL level ; Achieving MLL level ; Approaching Mastery level; and Achieving Mastery level, is given in Table 6.31 and Table 6.32 .

Table 6.31 describes about the performance in Numeracy test by boys and girls dropouts in the four districts. It revealed that a high percentage of dropouts remained at the zero level of achievement in all the four districts. It was the highest in Gadchiroli district (48 %) followed by Beed (38%) , Dhule (18%) and Jalana (13%) district.

A very small percentage of dropouts who could approaching mastery level or achieving mastery level was seen. It is almost negligible. As regards the No MLL level majority of the dropouts ranged from 30 percent in Gadchiroli to 57 percent in Dhule and Jalana districts . Genderwise and Areawise achievement levels of dropouts are illustrated with the help of graphs on page 102 and page 104 of this report. .

Majority of boys and girls were found at either zero level or No MLL level of attainment. This reflects on their poor schooling. Efforts are required to attract those dropouts towards learning through some kind of effective face to face alternate schooling.



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GADCHIROLI
JALANA
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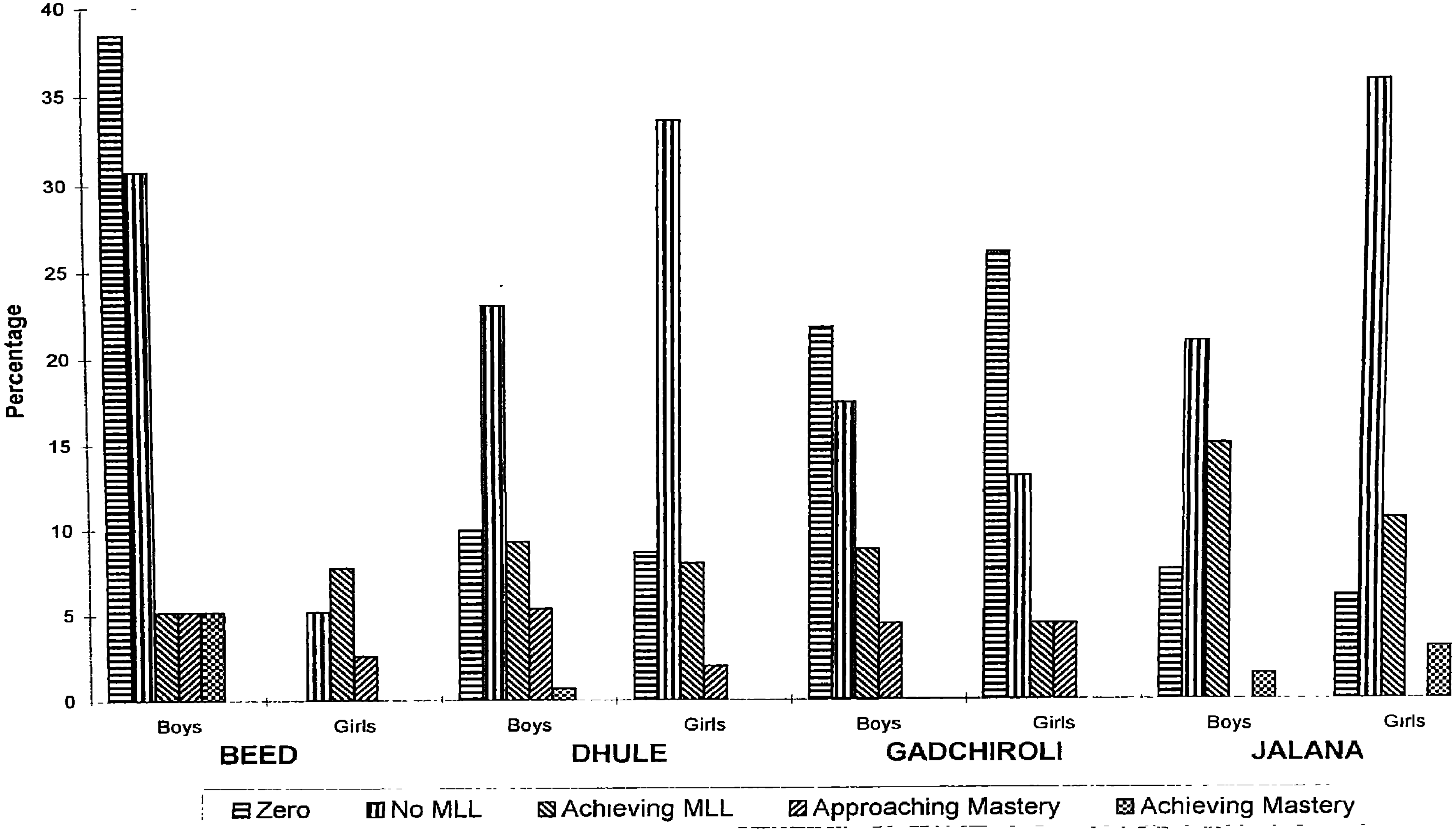
▤ SC & OBC
☐ SC & OTHERS
▦ ST & OBC
▨ ST & OTHERS
▒ OBC & OTHERS

Table 6.31 : Percentage of Dropouts on Different Levels of Achievement in Numeracy (Genderwise)

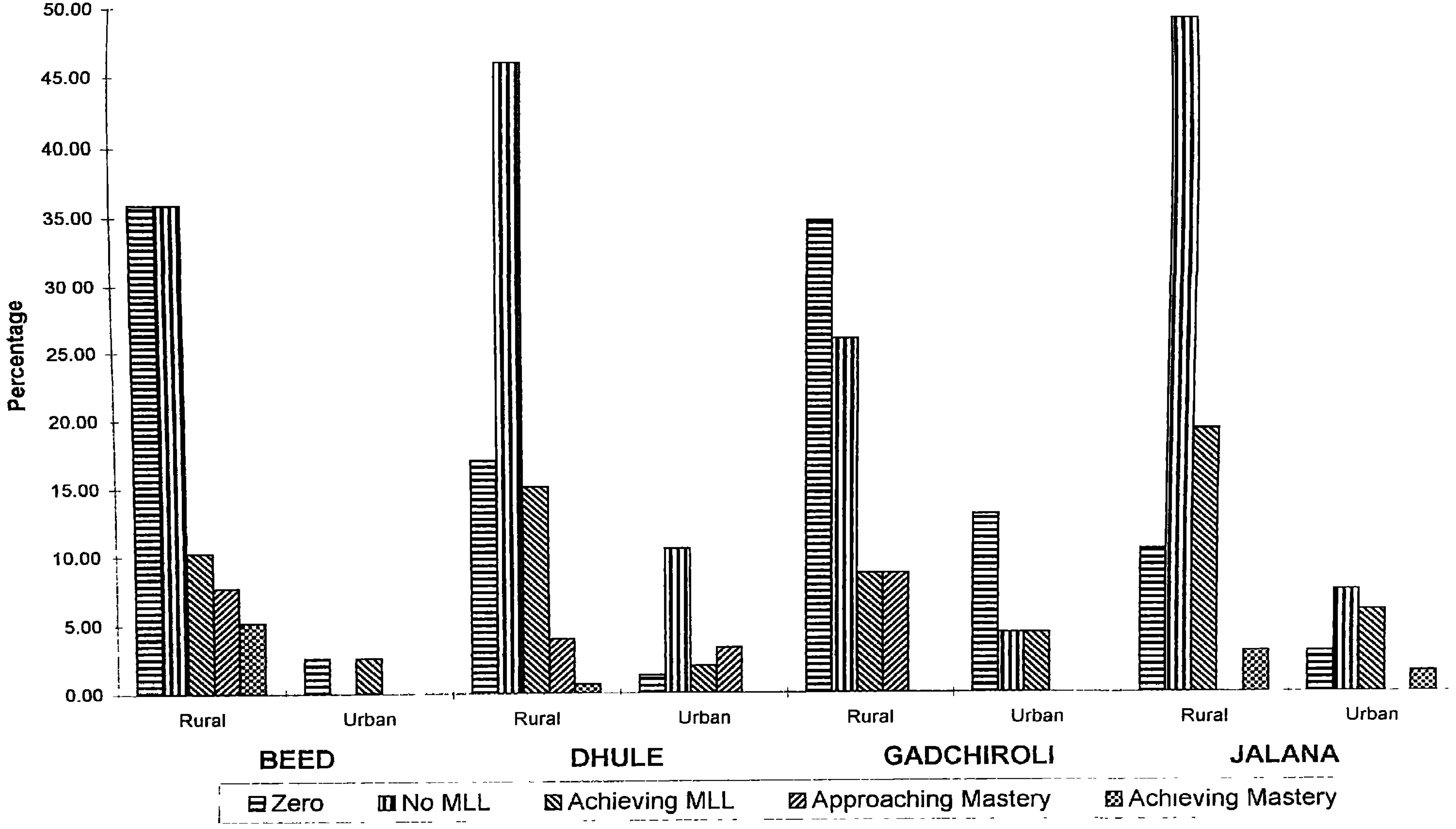
Levels	Districts											
	Beed			Dhule			Gadchiroli			Jalana		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Zero	38.46	0.00	38.46	9.87	8.55	18.42	21.74	26.09	47.83	7.46	5.97	13.43
No MLL	30.77	5.13	35.90	23.03	33.55	56.58	17.39	13.04	30.43	20.90	35.82	56.72
Achieving MLL	5.13	7.69	12.82	9.21	7.89	17.11	8.70	4.35	13.04	14.93	10.45	25.37
Approaching Mastery	5.13	2.56	7.69	5.26	1.97	7.24	4.35	4.35	8.70	0.00	0.00	0.00
Achieving Mastery	5.13	0.00	5.13	0.66	0.00	0.66	0.00	0.00	0.00	1.49	2.99	4.48

Figure 6.31 : Percentage of Dropouts on Different Levels of Achievement in Numeracy (Genderwise)



	Districts											
Levels		Beed			Dhule			Gadchiroli			Jalana	
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Zero	35.90	2.56	38.46	17.11	1.32	18.42	34.78	13.04	47.83	10.45	2.99	13.43
No MLL	35.90	0.00	35.90	46.05	10.53	56.58	26.09	4.35 3	0.43	49.25	7.46	56.72
Achieving MLL	10.26	2.56	12.82	15.13	1.97	17.11	8.70	4.35	13.04	19.40	5.97	25.37
Approaching Mastery	7.69	0.00	7.69	3.95	3.29	7.24	8.70	0.00	8.70	0.00	0.00	0.00
Achieving Mastery	5.13	0.00	5.13	0.66	0.00	0.66	0.00	0.00	0.00	2.99	1.49	4.48

Figure 6.32 : Percentage of Dropouts on Different Levels of Achievement in Numeracy (Areawise)



CHAPTER7

ACHIEVEMENT OF CLASS II STUDENTS

Learning Achievement of Class II students was assessed with the help of a simple Literacy and Numeracy Test. Mean Achievement of Class II students in Language and Mathematics and their different levels of achievement are presented in this chapter. Besides their achievement scores, both in Literacy and Numeracy, Class II student's age, his / her pre-school experience, class repetition and most difficult areas in Language and Mathematics are covered . The information , presented in 19 tables, is based on the Achievement Test for Class II students.

Student Characteristics - Class II

Age-wise percentage distribution of Class II students is given in Table 7.1 below. It revealed that the majority of students belonged to 7 years age group (49- 62 percent) in all the four districts. This was followed by the students who belonged to 8 years age group (17 - 34 percent). The percentage of students belonging to 10 + age group was very small. It is clear from the table that children get enrolled at the proper age in Class I and there are not many repeaters in the class .

Table 7.1: Percentage Distribution of Class II Students (Agewise)

	Districts			
Age	Beed	Dhule	Gadchiroli	Jalana
6	13.60	3.88	5.25	9.77
7	62.48	48.59	55.58	50.85
8	16.59	34.14	26.70	27.20
9	5.83	7.50	7.00	9.92
10	1.05	1.34	3.94	1.13
11	0.30	0.54	0.66	0.85
12	0.00	0.00	0.44	0.14

About 51 to 86 percent students have availed of Pre- school experience and education facility (Table 7.2) .This calls for strengthening, expanding and opening new Pre-School Education centres in all the villages in the districts.

Table 7.2 :Percentage of Class II Students with Pre-school Experience

Districts	Percentage
Beed	73.99
Dhule	50.60
Gadchiroli	86.00
Jalana	65.44

Students repeating Class II are only zero to 1.75 percent in the four districts. This is very low and negligible (Table 7.3).

Table 7.3 : Percentage of Class II Students On the Basis of Class Repetition

Districts	Percentage
Beed	0.15
Dhule	0.00
Gadchiroli	1.75
Jalana	0.28

Learning Achievement of Class II Students

The sampled Class II children were given an oral test in simple Literacy and Numeracy. Details of the test are presented in Table 2.7. Children were asked to read ten letters of Marathi alphabets and ten simple words in the literacy test. Achievement scores were processed to calculate Means and SDs.

A. Language

1. Mean Achievement Scores

Mean achievement scores and SDs of sampled students are tabulated in Table 7.4 . Students in Beed have the highest mean score (Mean = 12.72) , whereas students in Dhule district have the lowest mean score (Mean = 8.11). There are districtwise variations in the performance of class II students in Literacy test.

Table 7.4 : Mean Achievement of Class II Students in Language

Districts	N	Mean	SD
Beed	669.0	12.72	7.74
Dhule	747.0	8.11	6.86
Gadchiroli	457.0	10.40	7.28
Jalana	706.0	11.69	7.10

Table 7.5 : Mean Achievement of Class II Students in Language (Genderwise)

		Boys		Girls		Total		
Area	Districts	Mean	SD	Mean	SD	Mean	SD	Significance
Letter Reading	Beed	7.42	3.73	6.94	3.90	14.36	7.63	1.58
	Dhule	5.44	3.78	4.74	4.01	10.18	7.80	2.46
	Gadchiroli	6.38	3.83	6.26	3.62	12.64	7.45	0.35
	Jalana	7.26	3.72	7.07	3.70	14.33	7.42	0.66
Word Reading	Beed	5.95	4.33	4.88	4.42	10.83	8.75	3.12
	Dhule	3.20	3.47	2.81	3.61	6.01	7.08	1.52
	Gadchiroli	4.31	4.16	3.83	3.81	8.13	7.97	1.29
	Jalana	4.62	4.10	4.36	3.88	8.98	7.99	0.88

Genderwise distribution of mean scores in literacy test is given in Table 7.5. It revealed that students performed better in **letter** recognition test. They found the **word reading** comparatively difficult. Ability to read words is poor amongst Class II students in all the four districts. The overall performance of boys (Mean = 5.95) in both **letter** and **word reading** is better than girls (Mean = 4.88) in all the four districts. A significant difference in favour of boys was seen in Beed district for word reading.

There were areawise differences seen in the performance of Class II students in both parts of the literacy test. The Means and SDs are presented in Table 7.6 Urban students performed better than their rural counterparts except in Jalana district. .

Within the sampled students from schools in urban areas , students from Gadchiroli scored the highest in **letter reading** (Mean = 8.56) and **word reading** (Mean = 7.14) as compared to urban students in other three districts. The poorest performance was seen in word meaning test in case of rural students in Dhule district (Mean = 2.46). This suggests the need for area specific planning.

Table 7.6 : Mean Achievement of Class II Students in Language (Areawise)

		Rural		Urban		Total		
Area	**Districts**	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**	**Significance**
Letter Reading	Beed	7.14	3.86	7.58	3.56	14.72	7.42	1.25
	Dhule	4.67	3.96	6.59	3.35	11.26	7.31	6.25
	Gadchiroli	5.86	3.77	8.56	2.50	14.43	6.28	7.86
	Jalana	7.24	3.69	6.90	3.78	14.14	7.48	0.89
Word Reading	Beed	5.37	4.46	6.08	4.09	11.45	8.55	1.72
	Dhule	2.46	3.28	4.93	3.77	7.39	7.04	7.65
	Gadchiroli	3.45	3.82	7.14	3.40	10.59	7.22	8.55
	Jalana	4.38	3.97	5.14	4.17	9.52	8.13	1.84

There were marked differences observed in the performance of SC/ST and Others category students in Dhule and Gadchiroli districts. Students from Others category performed better than the students in SC/ ST category (Table 7.7).

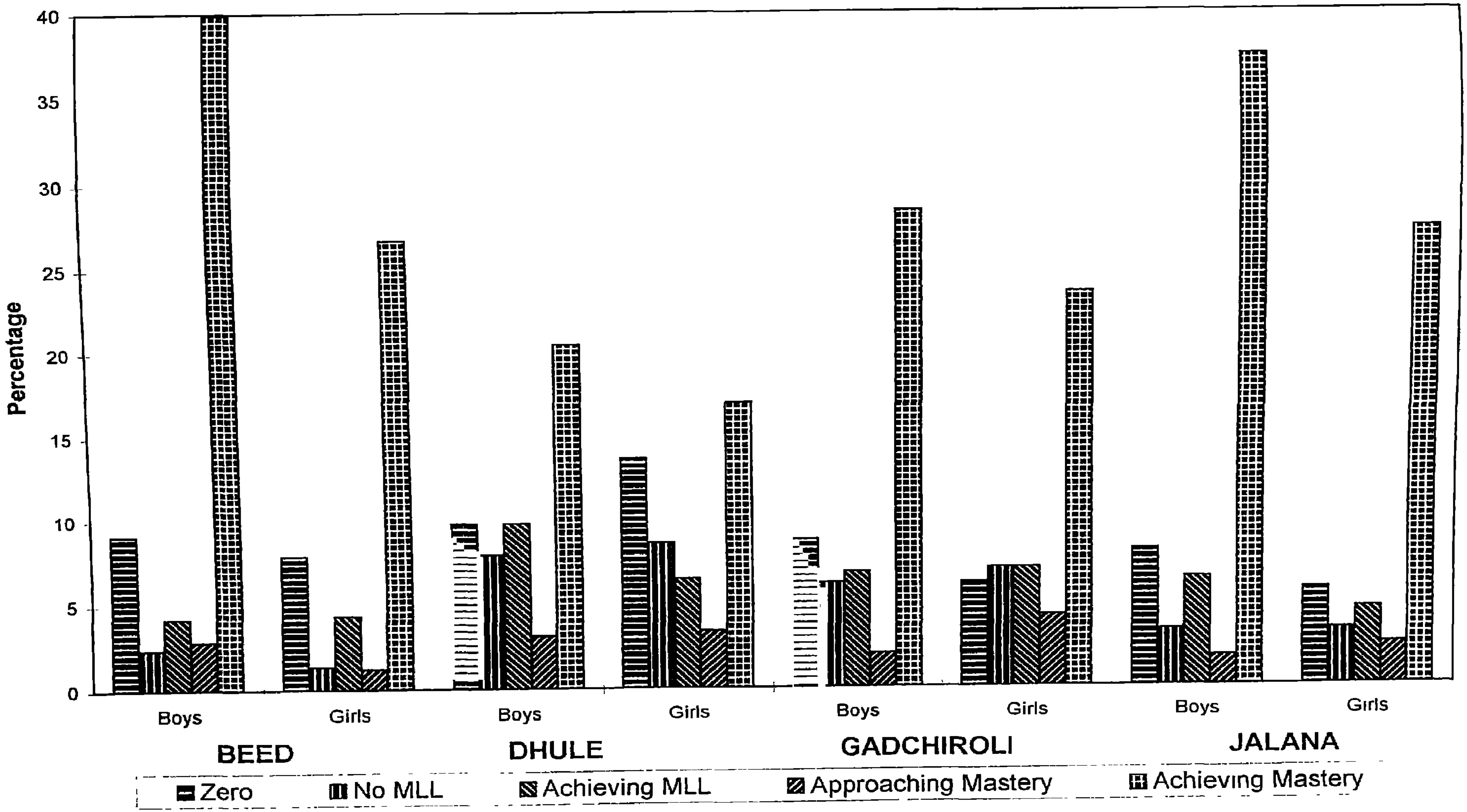
Table 7.7 : Mean Achievement of Class II Students in Language (Categorywise)

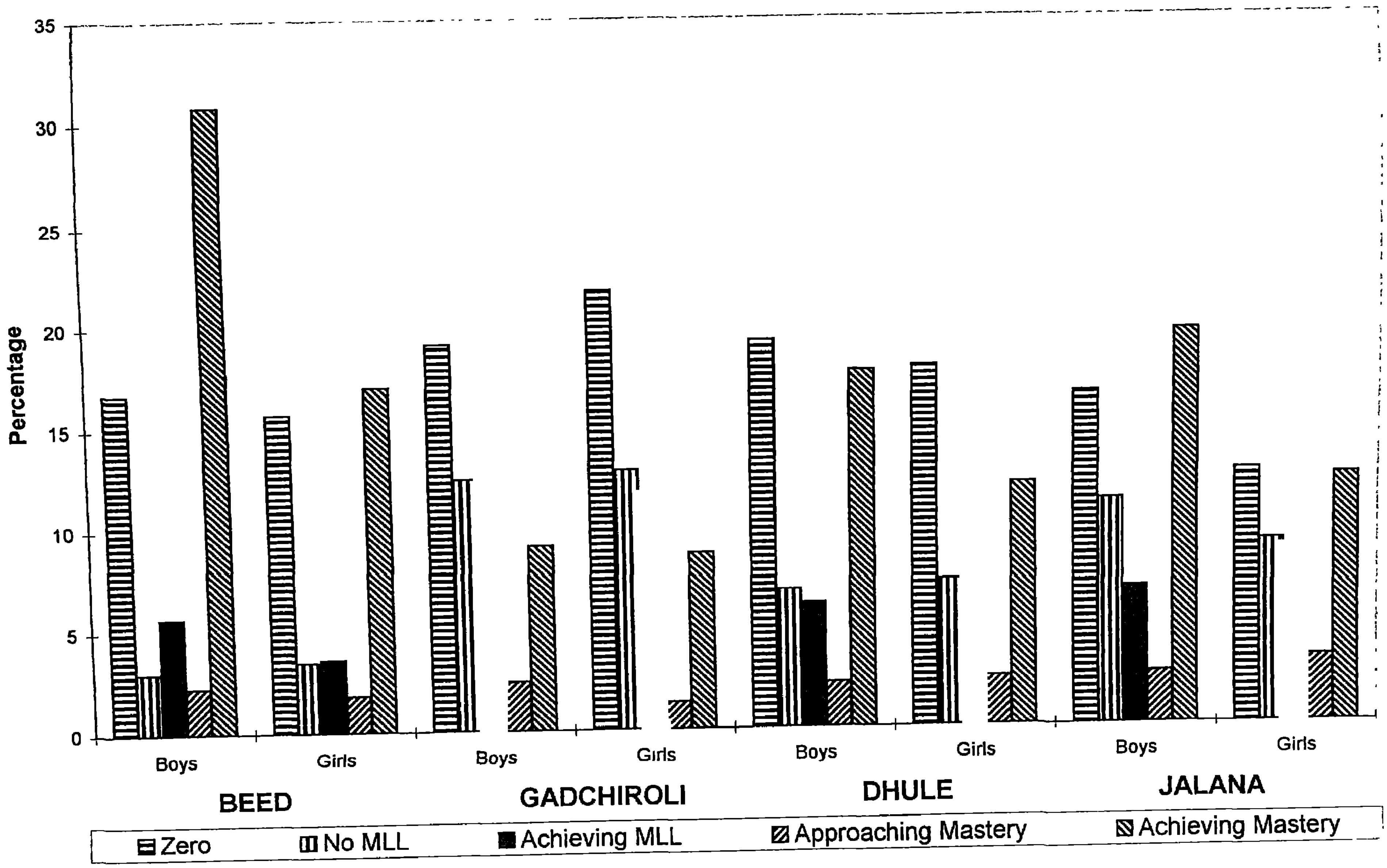
		SC/ST		Others		
Area	**Districts**	**Mean**	**SD**	**Mean**	**SD**	**Significance**
Letter Reading	Beed	6.88	4.09	7.30	3.73	1.06
	Dhule	4.29	3.86	6.12	3.74	6.51
	Gadchiroli	5.42	3.78	7.49	3.33	6.20
	Jalana	7.26	3.88	7.16	3.68	0.25
Word Reading	Beed	5.08	4.42	5.60	4.39	1.21
	Dhule	2.32	3.06	3.89	3.90	6.01
	Gadchiroli	3.11	3.75	5.32	3.97	6.02
	Jalana	4.38	4.05	4.53	4.00	0.37

Table 7.8 Percentage Distribution of Class II Students on Different Levels of Achievement in Language (Genderwise)

Area	Levels	Districts											
			Beed			Dhule			Gadchiroli			Jalana	
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Letter Reading	Zero	9.12	7.92	17.04	9.77	13.65	23.43	8.75	6.13	14.88	8.07	5.67	13.74
	No MLL	2.39	1.35	3.74	7.90	8.57	16.47	6.13	7.00	13.13	3.26	3.26	6.52
	Achieving MLL	4.19	4.33	8.52	9.77	6.43	16.20	6.78	7.00	13.79	6.37	4.53	10.91
	Approaching Mastery	2.84	1.20	4.04	3.08	3.35	6.43	1.97	4.16	6.13	1.70	2.41	4.11
	Achieving Mastery	39.91	26.76	66.67	20.48	17.00	37.48	28.45	23.63	52.08	37.39	27.34	64.73
Word Reading	Zero	16.74	15.70	32.44	19.14	21.82	40.96	19.26	17.94	37.20	16.57	12.61	29.18
	No MLL	2.99	3.44	6.43	12.45	12.85	25.30	6.78	7.22	14.00	11.19	9.07	20.25
	Achieving MLL	5.68	3.59	9.27	7.90	4.28	12.18	6.13	8.32	14.44	6.80	5.95	12.75
	Approaching Mastery	2.24	1.79	4.04	2.41	1.34	3.75	2.19	2.41	4.60	2.55	3.26	5.81
	Achieving Mastery	30.79	17.04	47.83	9.10	8.70	17.80	17 72	12.04	29 76	19.69	12.32	32.01

Figure 7.8a : Percentage Distribution of Class II Students on Different Levels of Achievement in Language - Letter Reading
(Genderwise)

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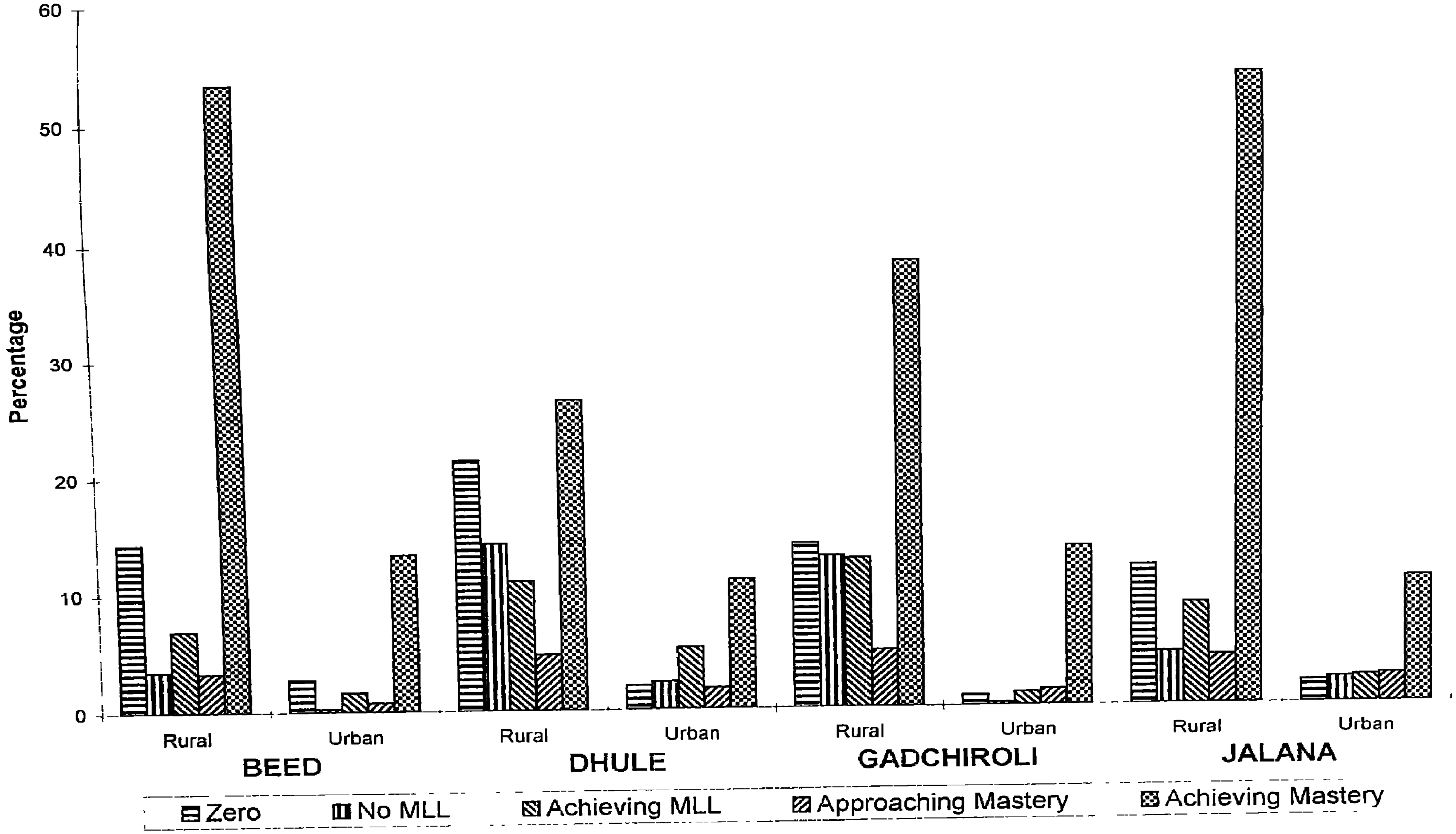
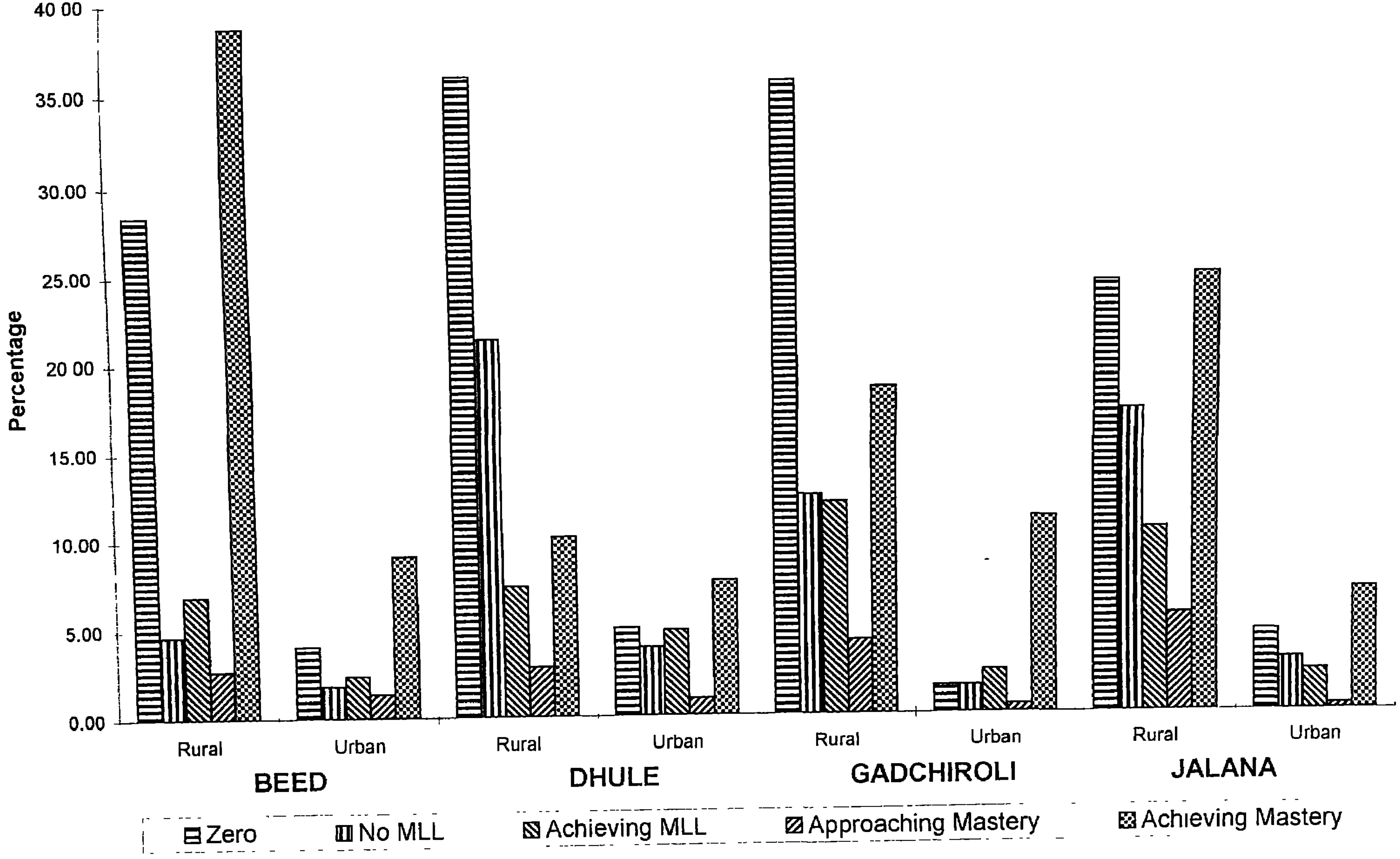
BEED
GADCHIROLI
DHULE
JALANA
▤ Zero
▥ No MLL
■ Achieving MLL
▨ Approaching Mastery
▧ Achieving Mastery

Table 7.9 : Percentage Distribution of Class II Students on Different Levels of Achievement in Language (Areawise)

Area	Levels	Districts											
		Beed			Dhule			Gadchiroli			Jalana		
		Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Letter Reading	Zero	14.35	2.69	17.04	21.42	2.01	23.43	14.00	0.88	14.88	11.90	1.84	13.74
	No MLL	3.44	0.30	3.74	14.19	2.28	16.47	12.91	0.22	13.13	4.39	2.12	6.52
	Achieving MLL	6.88	1.64	8.52	10.98	5.22	16.20	12.69	1.09	13.79	8.64	2.27	10.91
	Approaching Mastery	3.29	0.75	4.04	4.69	1.74	6.43	4.81	1.31	6.13	4.11	0.00	4.11
	Achieving Mastery	53.36	13.30	66.67	26.51	10.98	37.48	38.51	13.57	52.08	53.97	10.76	64.73
Word Reading	Zero	28.40	4.04	32.44	36.01	4.95	40.96	35.67	1.53	37.20	24.65	4.53	29.18
	No MLL	4.63	1.79	6.43	21.42	3.88	25.30	12.47	1.53	14.00	17.28	2.97	20.25
	Achieving MLL	6.88	2.39	9.27	7.36	4.82	12.18	12.04	2.41	14.45	10.48	2.27	12.75
	Approaching Mastery	2.69	1.35	4.04	2.81	0.94	3.75	4.16	0.44	4.60	5.52	0.28	5.81
	Achieving Mastery	38.71	9.12	47.83	10.17	7.63	17.80	18.60	11.16	29.76	25.07	6.94	32.01

Figure 7.9a : Percentage Distribution of Class II Students on Different Levels of Achievement in Language - Letter Reading (Areawise)

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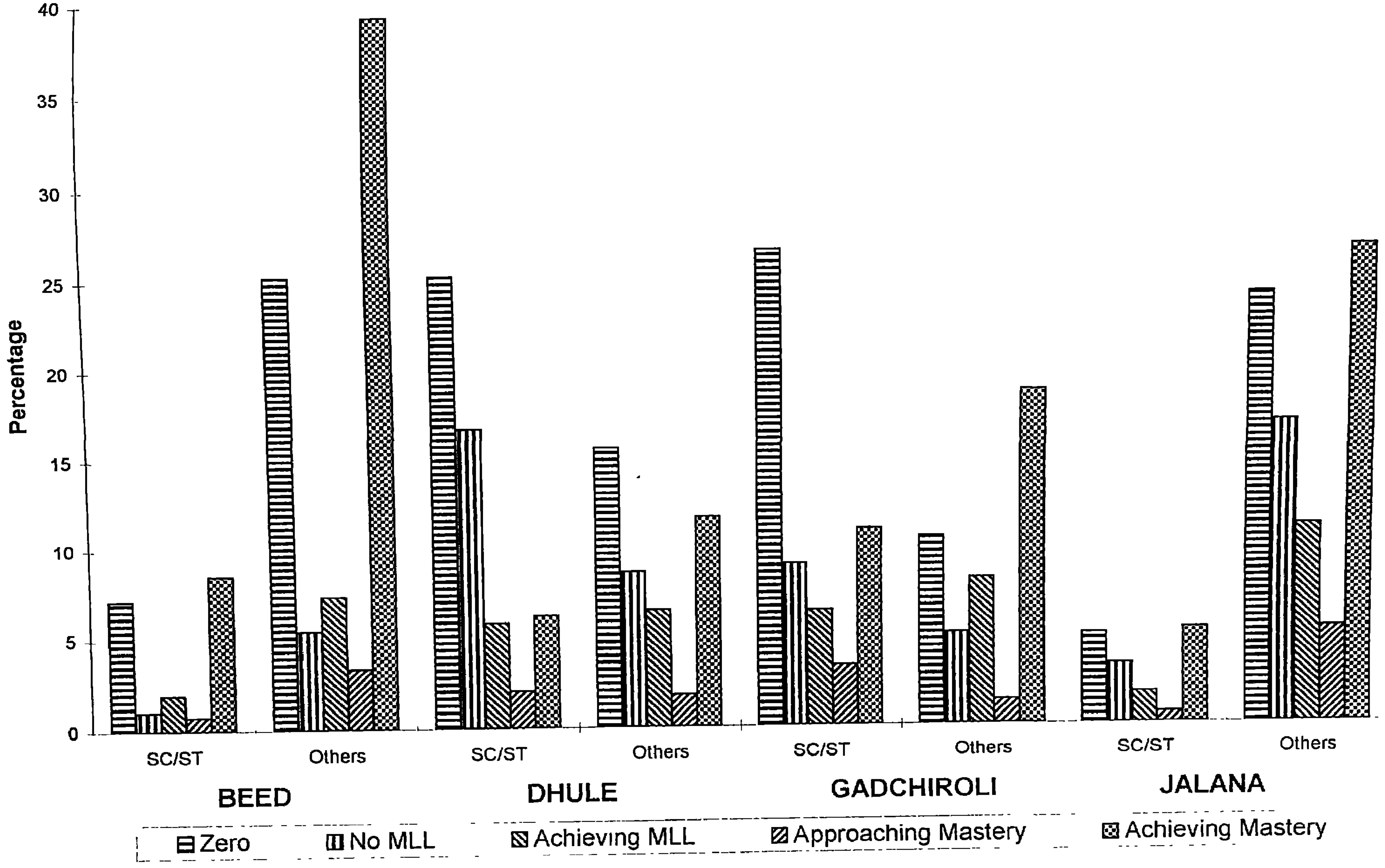
DHULE
GADCHIROLI
JALANA
Zero
No MLL
Achieving MLL
Approaching Mastery
Achieving Mastery

Table 7.10: Percentage Distribution of Class II Students on Different Levels of Achievement in Language (Categorywise)

Area	Levels	Districts											
		Beed			Dhule			Gadchiroli			Jalana		
		SC/ST	Others	Total	SC/ST	Others	Total	SC/ST	Others	Total	SC/ST	Others	Total
Letter Reading	Zero	4.48	12.56	17.04	16.87	6.56	23.43	11.16	3.72	14.88	2.27	11.47	13.74
	No MLL	0.45	3.29	3.74	10.84	5.62	16.47	9.41	3.72	13.13	1.27	5.24	6.52
	Achieving MLL	0.90	7.62	8.52	8.03	8.17	16.20	8.53	5.25	13.79	0.99	9.92	10.91
	Approaching Mastery	0.75	3.29	4.04	3.35	3.08	6.43	4.38	1.75	6.13	0.42	3.68	4.11
	Achieving Mastery	12.86	53.81	66.67	16.87	20.62	37.48	22.76	29.32	52.08	10.76	53.97	64.73
Word Reading	Zero	7.17	25.26	32.44	25.30	15.66	40.96	26.70	10.50	37.20	4.96	24.22	29.18
	No MLL	1.05	5.38	6.43	16.73	8.57	25 30	8.97	5.03	14.00	3.26	17.00	20.25
	Achieving MLL	1.94	7.32	9.27	5.76	6.43	12.18	6.35	8.10	14.45	1.70	11.05	12.75
	Approaching Mastery	0.75	3.29	4.04	2.01	1.74	3.75	3.28	1.31	4.60	0.57	5.24	5.81
	Achieving Mastery	8.52	39.31	47.83	6.16	11.65	17.80	10.94	18.82	29.76	5.24	26.77	32.01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GADCHIROLI
JALANA
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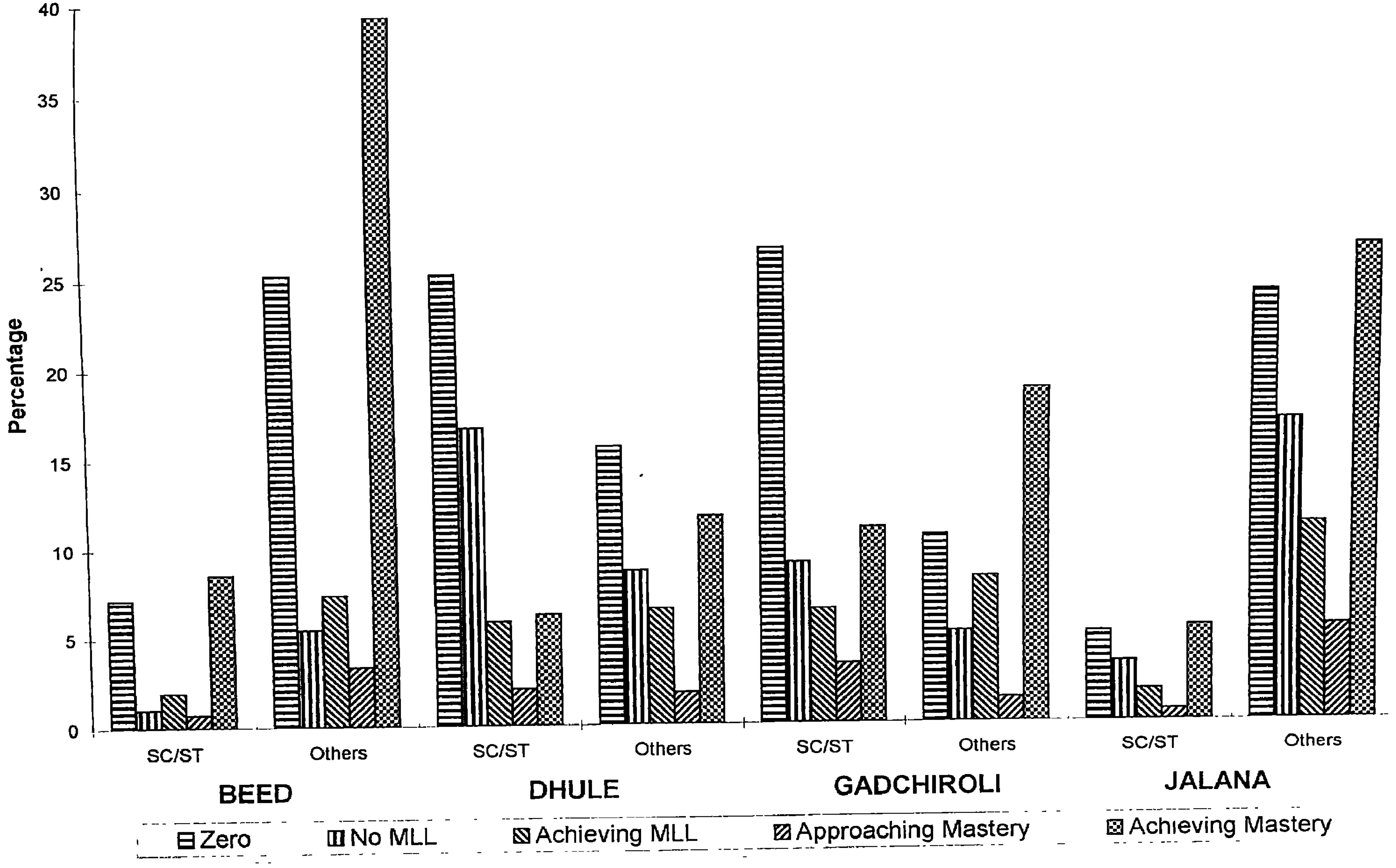
◫ No MLL
▧ Achieving MLL
▨ Approaching Mastery
▩ Achieving Mastery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GADCHIROLI
JALANA
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◫ No MLL
▧ Achieving MLL
▨ Approaching Mastery
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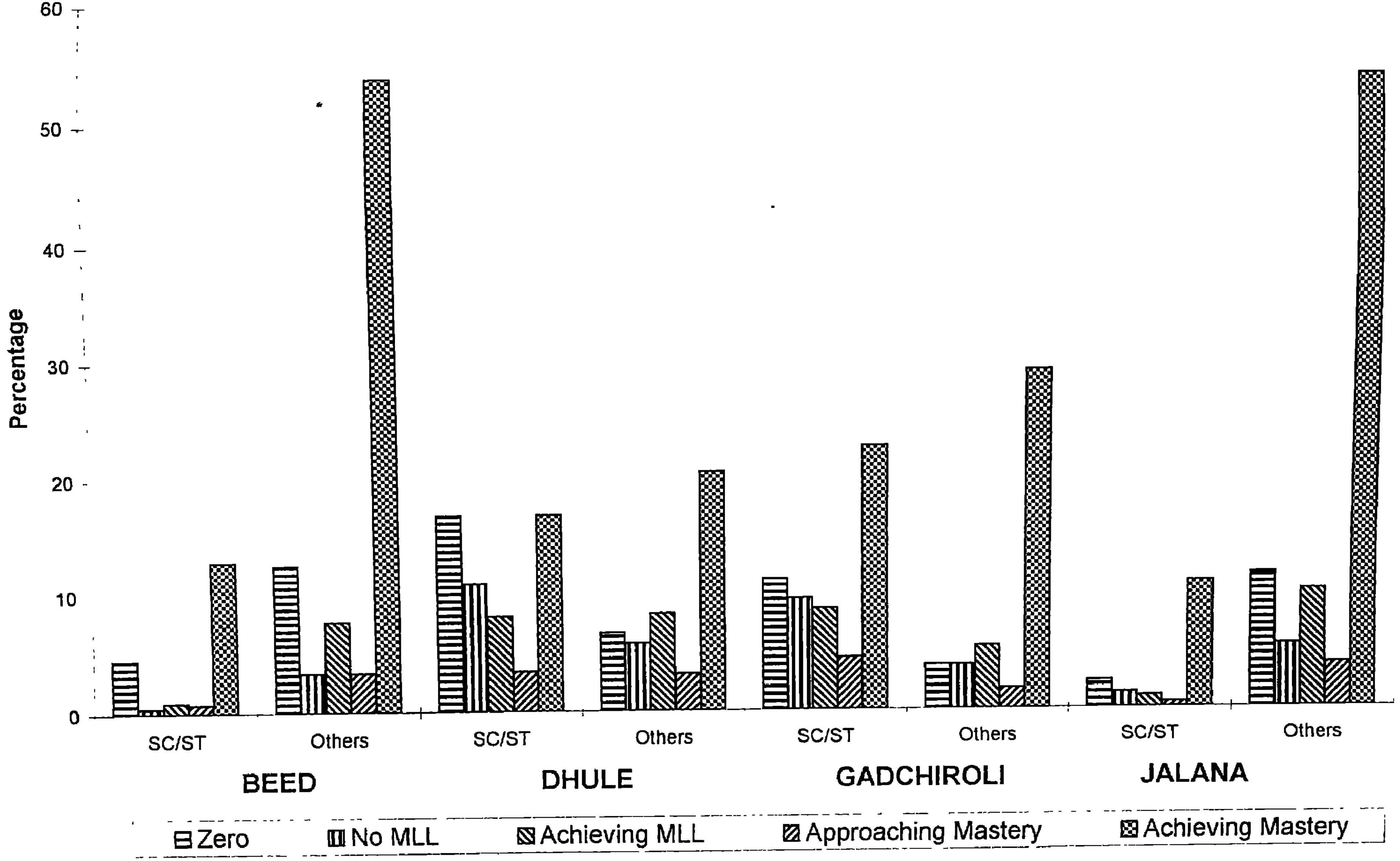
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SC/ST
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BEED
DHULE
GADCHIROLI
JALANA
▤ Zero
▥ No MLL
▧ Achieving MLL
▨ Approaching Mastery
▩ Achieving Mastery

2. Achievement Levels

Analyses of the achievement levels by Class II students are presented in Table 7.8, Table 7.9 and Table 7.10.

Genderwise analysis of achievement levels revealed that the boys performed better than girls at each level (Table 7.8).

B. Mathematics

1. Mean Achievement Scores

A simple Numeracy test comprising 14 items related to number recognition, addition and subtraction was administered to assess the achievement of Class II students. Details about the test items are given in Table 2.8.

The overall achievement of sampled Class II students was low (Table 7.11). Students in Jalana had the highest mean score (Mean = 9.16), whereas Gadchiroli had the lowest (Mean = 5.83).

Table 7.11 : Mean Achievement of Class II Students in Mathematics

Districts	N	Mean	SD
Beed	669.0	8.31	4.92
Dhule	747.0	6.20	4.00
Gadchiroli	457.0	5.83	4.46
Jalana	706.0	9.16	4.52

Table 7.12 : Mean Achievement of Class II Students in Mathematics (Genderwise)

		Boys		Girls		Total		
Area	Districts	Mean	SD	Mean	SD	Mean	SD	Significance
Number Recognition	Beed	4.02	2.05	3.49	2.09	7.51	4.14	3.29
	Dhule	2.87	1.84	2.50	1.78	5.38	3.62	2.80
	Gadchiroli	3.08	1.96	2.49	1.74	5.57	3.70	3.41
	Jalana	3.89	2.02	3.67	2.10	7.55	4.12	1.38
Addition & Subtraction	Beed	4.79	3.20	4.13	3.26	8.91	6.46	2.61
	Dhule	3.65	2.58	3.37	2.63	7.01	5.21	1.45
	Gadchiroli	3.37	3.23	2.68	3.00	6.04	6.23	2.37
	Jalana	5.58	2.83	5.10	3.06	10.68	5.89	2.15

Boys had higher mean scores than girls in all the four districts (Table 7.12). Surprisingly, students performed better on addition and subtraction operations than number recognition. This required further study.

Data in Table 7.13 revealed that students from urban schools had higher mean scores than those from rural schools indicating poor performance and poor teachng in rural parts of districts. This calls for immediate attention and appropriate interventions.

Table 7.13 : Mean Achievement of Class II Students in Mathematics (Areawise)

		Rural		Urban		Total		
Area	Districts	Mean	SD	Mean	SD	Mean	SD	Significance
Number Recognition	Beed	3.70	2.10	4.22	1.94	7.92	4.05	2.63
	Dhule	2.49	1.81	3.39	1.69	5.88	3.49	5.91
	Gadchiroli	2.68	1.85	3.35	1.94	6.03	3.79	2.77
	Jalana	3.68	2.06	4.33	1.94	8.01	4.00	3.32
Addition & Subtraction	Beed	4.33	3.23	5.30	3.20	9.63	6.43	3.03
	Dhule	3.30	2.57	4.24	2.59	7.54	5.16	4.13
	Gadchiroli	2.78	3.10	4.26	3.06	7.04	6 16	3.87
	Jalana	5.19	3.00	6.25	2.46	11.44	5.46	4.12

Categorywise variations in mean achievement scores of SC/ ST and Others in number recognition test was observed negligible in Beed and Jalana districts (Table 7.14). Students from Others category performed better in Dhule and Gadchiroli than SC/ ST students. However, students from Others category in Dhule district in the area of addition and subtraction did not differ significantly from students belonging to SC/ST category .

Table 7.14 : Mean Achievement of Class II Students in Mathematics (Categorywise)

		SC/ST		Others		
Area	Districts	Mean	SD	Mean	SD	Significance
Number Recognition	Beed	3.59	2.15	3.85	2.06	1.22
	Dhule	2.47	1.78	2.97	1.83	3.72
	Gadchiroli	2.52	1.88	3.15	1.82	3.61
	Jalana	3.88	1.99	3.77	2.07	0.52
Addition & Subtraction	Beed	3.78	3.19	4.69	3.23	2.92
	Dhule	3.35	2.45	3.71	2.78	1.88
	Gadchiroli	2.30	2.86	3.99	3.23	5.83
	Jalana	5.06	2.86	5.43	2.95	1.24

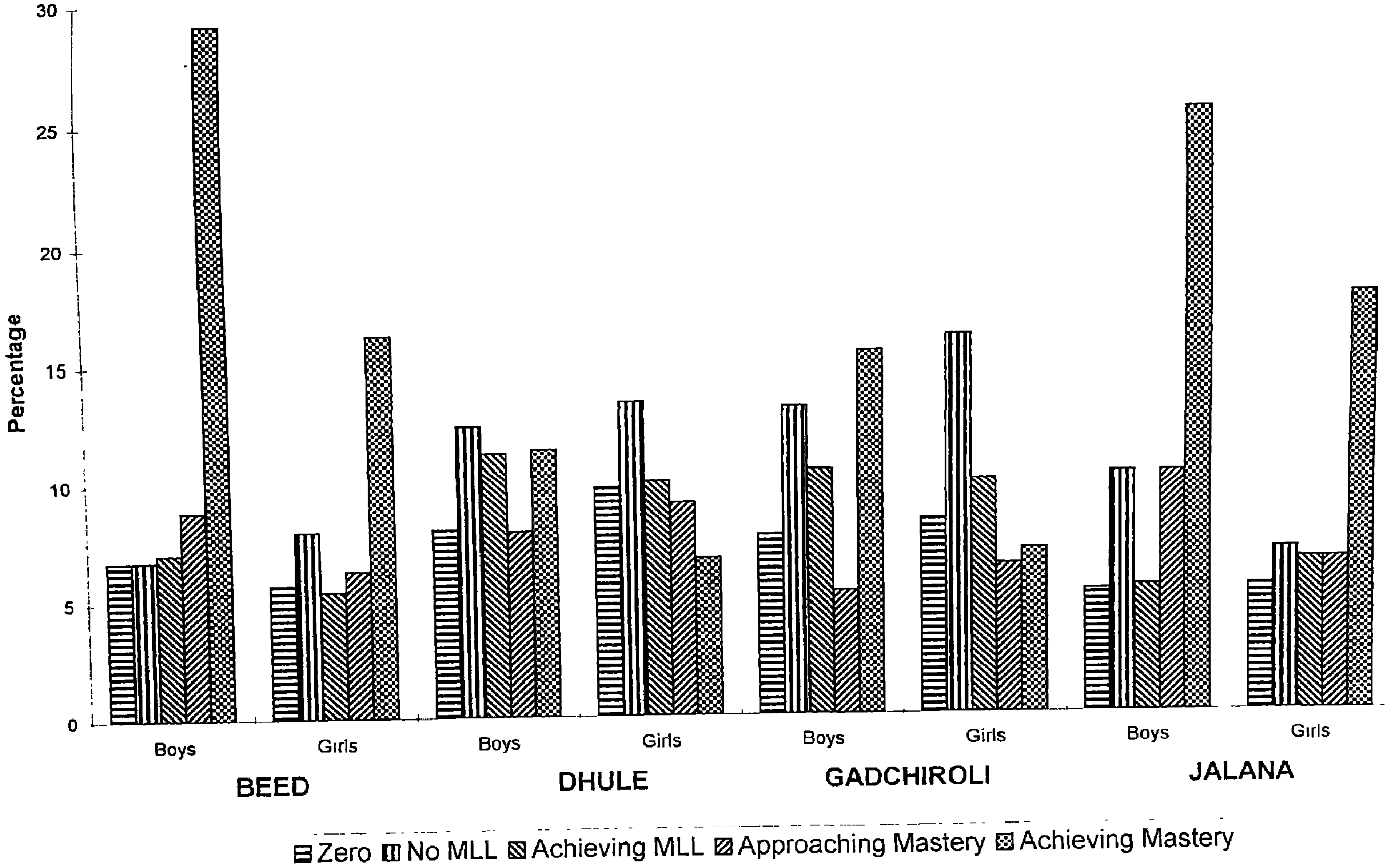
It is interesting to note here that all the students scored better in the area of addition and Subtraction than the Number recognition. This needs further investigation.

2.Achievement Levels

Achievement levels in Numeracy were found to be lower than the literacy. About 18% students in Dhule district could not recognize even one number correctly (Table 7.15) . A greater percentage of students in all the four districts could not do even a single addition or subtraction . It is interesting to observe that a fairly high percentage of students in all the four districts could achieve mastery . This requires in -depth study.

Table 7.15 : Perecentage Distribution of Class II Students on Different Levels of Achievement in Mathematics (Genderwise)

Area	Levels	Districts											
		Beed			Dhule			Gadchiroli			Jalana		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Number Recognition	Zero	6.73	5.68	12.41	8.03	9.77	17.80	7.66	8.32	15.97	5.24	5.38	10.62
	No MLL	6.73	7.92	14.65	12.45	13.39	25.84	13.13	16.19	29.32	10.34	6.94	17.28
	Achieving MLL	7.03	5.38	12.41	11.24	10.04	21.29	10.50	10.07	20.57	5.38	6.52	11.90
	Approaching Mastery	8.82	6.28	15.10	7.90	9.10	17.00	5.25	6.35	11.60	10.34	6.52	16.86
	Achieving Mastery	29.15	16.29	45.44	11.38	6.69	18.07	15.54	7.00	22.54	25.50	17.85	43.34
Addition & Subtraction	Zero	13.00	12.11	25.11	9.91	10.44	20.35	18.82	20.79	39.61	8.36	8.22	16.57
	No MLL	6.73	5.38	12.11	14.99	14.99	29.99	10.50	10.07	20.57	3.26	4.39	7.65
	Achieving MLL	4.48	2.54	7.03	5.49	5.49	10.98	3.28	2.41	5.69	2.83	1.70	4.53
	Approaching Mastery	8.67	7.32	15.99	12.18	10.58	22.76	5.25	6.13	11.38	15.01	10.62	25.64
	Achieving Mastery	25.56	14.20	39.76	8.43	7.50	15.93	14.22	8.53	22.76	27.34	18.27	45.61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Boys
Girls
BEED
DHULE
GADCHIROLI
JALANA
▤ Zero
▥ No MLL
▧ Achieving MLL
▨ Approaching Mastery
▩ Achieving Mastery

Figure 7.15b : Percentage Distribution of Class II Students on the Basis of Levels of Achievement in Mathematics - Addition & Subtraction
(Genderwise)

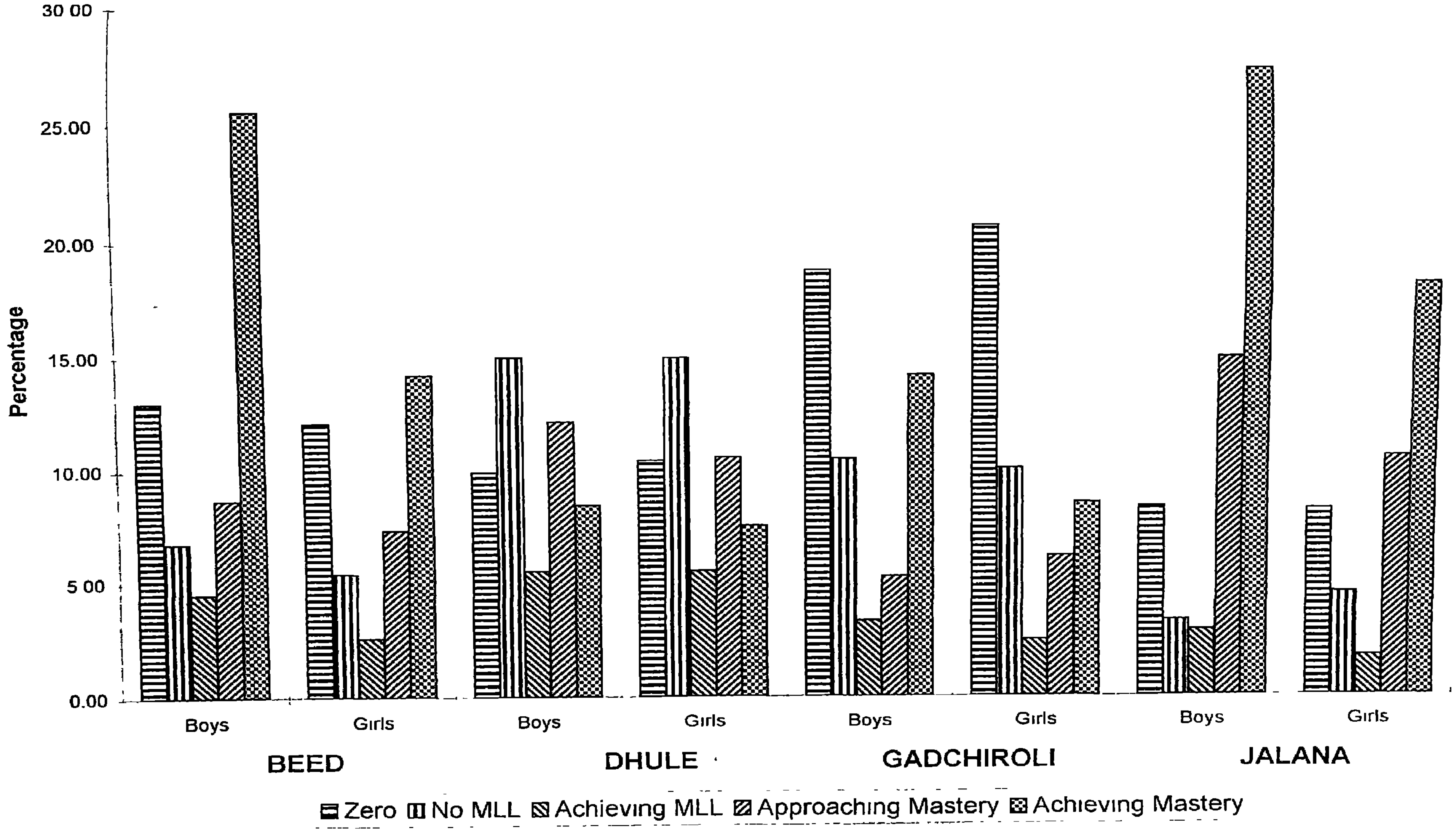
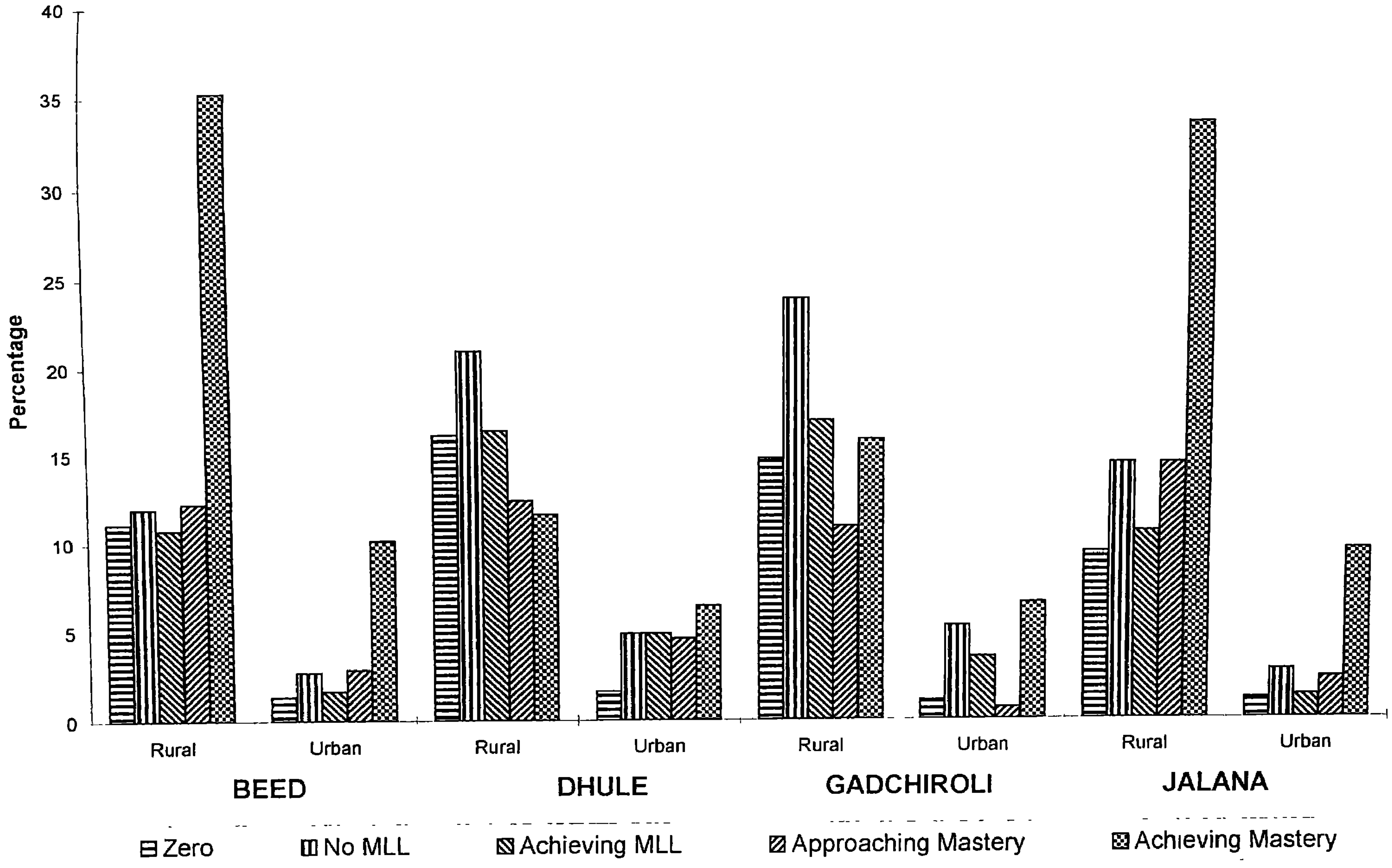


Table 7.16 : Percentage Distribution of Class II Students on Different Levels of Achievement in Mathematics (Areawise)

		Districts											
		Beed			Dhule			Gadchiroli			Jalana		
Area	Levels	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Number Recognition	Zero	11.06	1.35	12.41	16.20	1.61	17.80	14.88	1.09	15.97	9.49	1.13	10.62
	No MLL	11.96	2.69	14.65	21.02	4.82	25.84	24.07	5.25	29.32	14.59	2.69	17.28
	Achieving MLL	10.76	1.64	12.41	16.47	4.82	21.29	17.07	3.50	20.57	10.62	1.27	11.90
	Approaching Mastery	12.26	2.84	15.10	12.45	4.55	17.00	10.94	0.66	11.60	14.59	2.27	16.86
	Achieving Mastery	35.28	10.16	45.44	11.65	6.43	18.07	15.97	6.56	22.54	33.71	9.63	43.34
Addition & Subtraction	Zero	21.38	3.74	25.11	17.67	2.68	20.35	36.32	3.28	39.61	15.30	1.27	16.57
	No MLL	10.46	1.64	12.11	23.96	6.02	29.99	16.19	4.38	20.57	6.80	0.85	7.65
	Achieving MLL	5.68	1.35	7.03	8.70	2.28	10.98	3.94	1.75	5.69	3.97	0.57	4.53
	Approaching Mastery	14.05	1.94	15.99	17.00	5.76	22.76	9.85	1.53	11.38	21.25	4.39	25.64
	Achieving Mastery	29.75	10.01	39.76	10.44	5.49	15.93	16.63	6.13	22.76	35.69	9.92	45.61

Rural students from all the four districts performed better (Table 7.16). Areawise variations were observed distinctly at the zero and achieving mastery levels of attainment.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Rural
Urban
BEED
DHULE
GADCHIROLI
JALANA
▤ Zero
▥ No MLL
▧ Achieving MLL
▨ Approaching Mastery
▩ Achieving Mastery

Figure 7.16b : Percentage Distribution of Class II Students on the Basis of Levels of Achievement in Mathematics - Addition & Subtraction (Areawise)

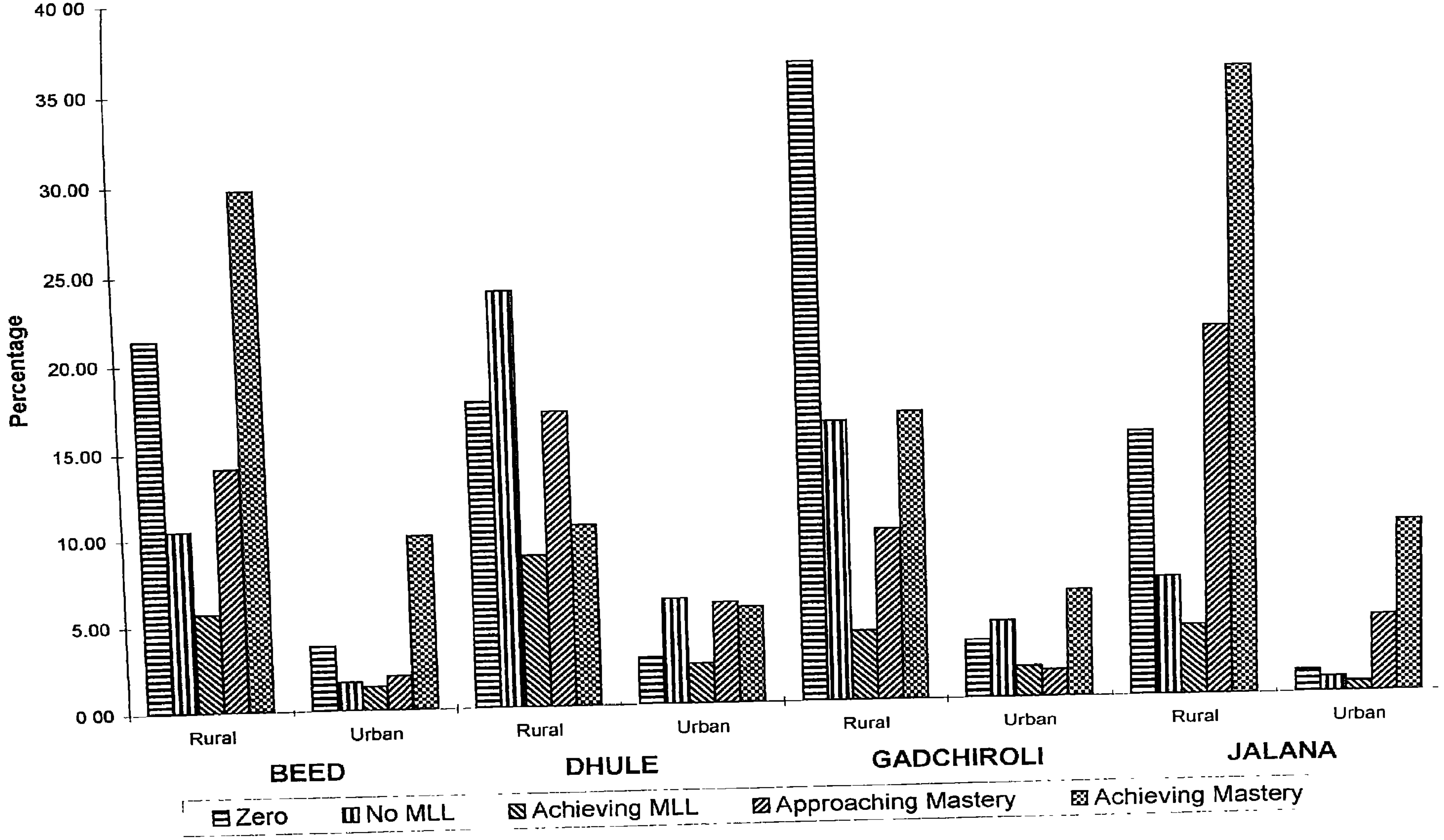
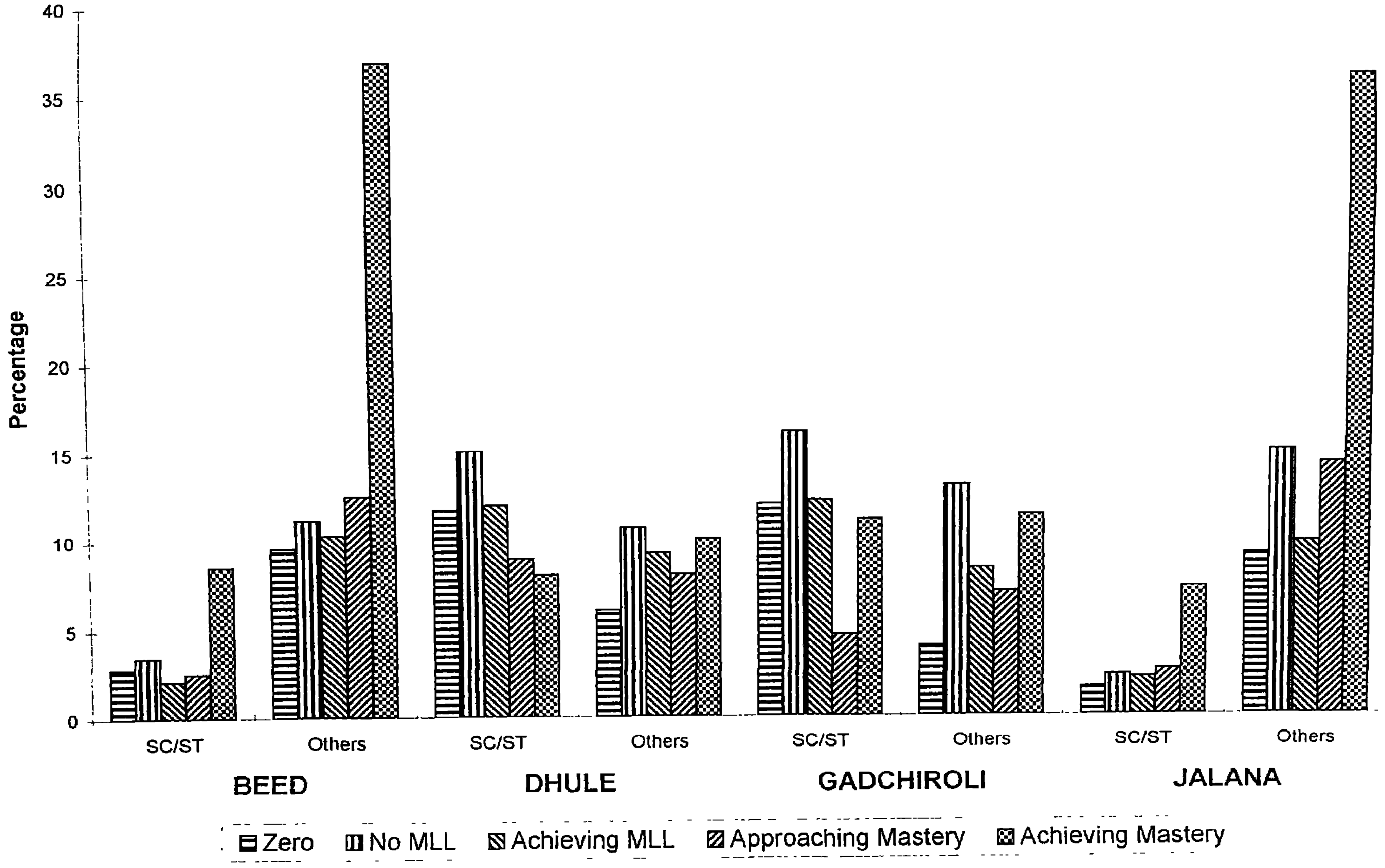


Table 7.17 : Percentage Distribution of Class II Students on Different Levels of Achievement in Mathematics (Categorywise)

Area	Levels	Districts											
		Beed			Dhule			Gadchiroli			Jalana		
		SC /ST	Others	Total	SC /ST	Others	Total	SC /ST	Others	Total	SC /ST	Others	Total
Number Recognition	Zero	2.84	9.57	12.41	11.78	6.02	17.80	12.04	3.94	15.97	1.56	9.07	10.62
	No MLL	3.44	11.21	14.65	15.13	10.71	25.84	16.19	13.13	29.32	2.27	15.01	17.28
	Achieving MLL	2.09	10.31	12.41	12.05	9.24	21.29	12.25	8.32	20.57	2.12	9.77	11.90
	Approaching Mastery	2.54	12.56	15.10	8.97	8.03	17.00	4.60	7.00	11.60	2.55	14.31	16.86
	Achieving Mastery	8.52	36.92	45.44	8.03	10.04	8.07	11.16	11.38	22.54	7.22	36.12	43.34
Addition & Subtraction	Zero	6.43	18.68	25.11	10.84	9.50	20.35	27.13	12.47	39.61	2.55	14.02	16.57
	No MLL	2.24	9.87	12.11	18.47	11.51	29.99	12.91	7.66	20.57	1.56	6.09	7.65
	Achieving MLL	1.64	5.38	7.03	6.96	4.02	10.98	2.84	2.84	5.69	1.13	3.40	4.53
	Approaching Mastery	3.74	12.26	15.99	12.85	9.91	22.76	5.03	6.35	11.38	4.53	21.10	25.64
	Achieving Mastery	5.38	34.38	39.76	6.83	9.10	15.93	8.32	14.44	22.76	5.95	39.66	45.61

There were wide disparities in mean achievement scores of students belonging to SC/ ST and Others category. In Dhule and Gadchiroli districts students belonging to SC/ ST category performed significantly higher than Others. This was reversed in Beed and Jalana districts. This calls for area specific planning.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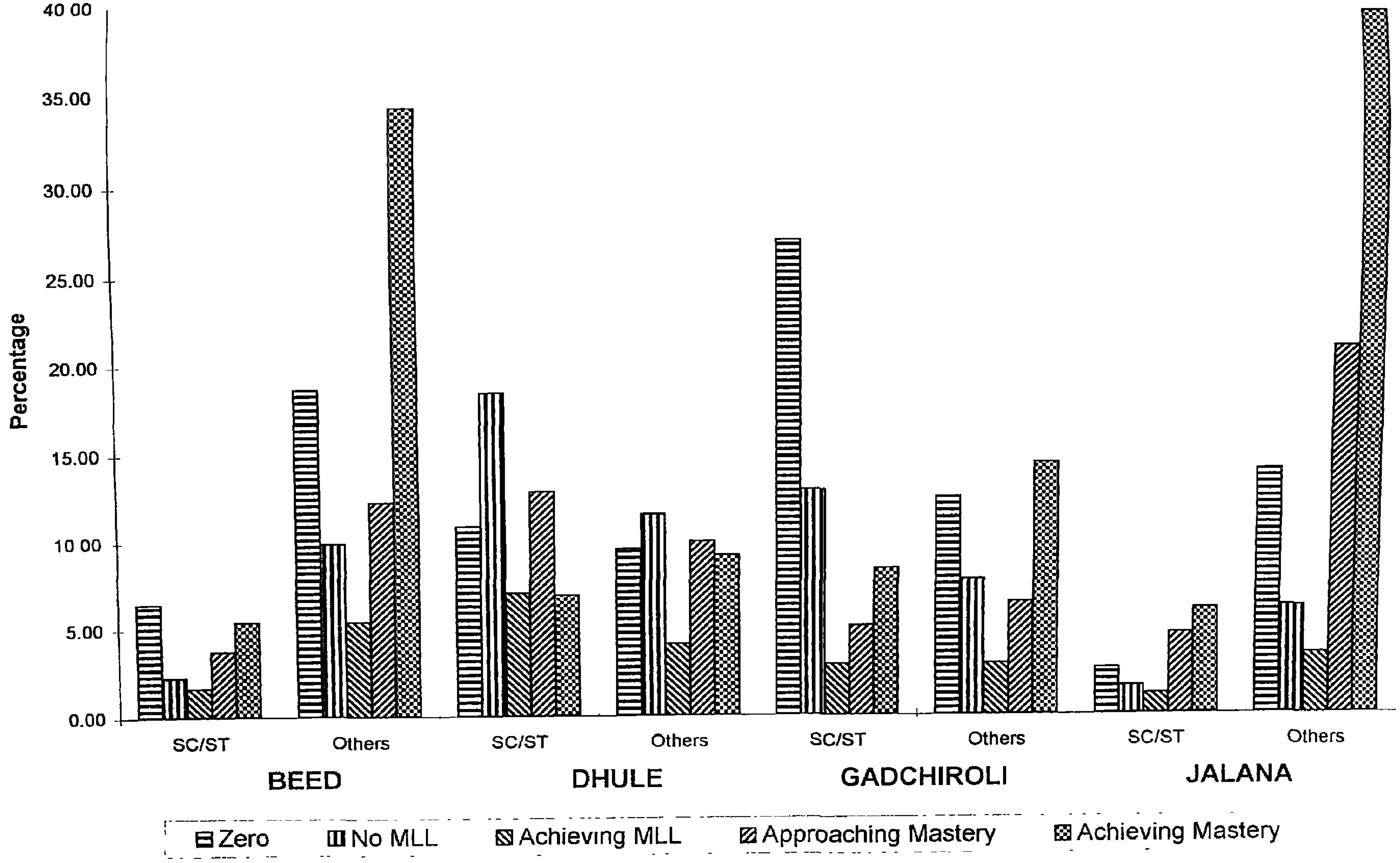
SC/ST
Others
BEED
DHULE
GADCHIROLI
JALANA
Zero
No MLL
Achieving MLL
Approaching Mastery
Achieving Mastery

Figure 7.17b : Percentage Distribution of Class II Students on the Basis of Levels of Achievement in Mathematics - Addition & Subtraction (Categorywise)



3. Areas of Difficulty

The most difficult items in the Literacy Test are summarised in Table 7.18. Words beginning and ending with matra were found more difficult than others. Probably this is one of the reasons for low achievement observed at the Class III or Class IV level.

Table 7.18: Five Most Difficult Items in Literacy

S.No.	Item No	Description of Item	Percentage of Students (Who did not read) Beed	Dhule	Gadchiroli	Jalana
1	13	Reading Words (Sarala)	21.52	27.98	22.98	33.57
2	16	Reading Words(Chimani)	26.61	25.84	24.07	41.93
3	18	Reading Words (Bail)	28.10	26.91	29.54	46.74
4	19	Reading Words (Bot)	24.66	26.91	33.92	51.42
5	14	Reading Words (Door)	23.47	30.52	24.73	38.10

This may be brought to the notice of teachers teaching Classes I and II. Corrective measures can be taken in raising achievement level of students in literacy skills.

Table 7.19: Five Most Difficult Items in Numeracy

S.No.	Item No	Description of Item	Percentage of Students (Who did not do) Beed	Dhule	Gadchiroli	Jalana
1	12	Subtraction(8-8)	41.55	39.49	39.17	31.30
2	3	Choose Largest Number (42,38)	39.76	50.47	51.86	49.29
3	8	Addition (7+0)	35.13	40.29	31.07	41.64
4	6	Choose Smallest Number(34,41)	45.29	44.31	49.02	49.15
5	10	Addition (0+6)	37.82	30.92	39.17	38.81

A summary of five most difficult items in Numeracy test is given in Table 7.19 below. It revealed that students from Class II could not differentiate between smaller and larger numbers (Item 3 & 6). These were the two digit numbers. Items 8 & 10 were related to the operations involving zero. A fairly large percentage of students (31 - 42 percent) failed to subtract the number 8 from 8 . Teachers teaching in lower classes need to be trained in teaching these basic key concepts.

□

CHAPTER 8

STUDENTS' CHARACTERISTICS

The information about Class IV students' home background, their socio-economic status, nutritional and health status, Pre-School education, medium of instruction, getting academic help and support from the family, access to reading material, different instructional activities, etc is presented here in 35 tables. The information presented in these tables was consolidated on the basis of filled in Student Present Schedule (SP).

The total number of Class IV students in the sample was 2655 out of which 708, 812, 479, 656 were drawn from the sampled schools in Beed, Dhule, Gadchiroli and Jalana districts respectively. The distribution of the sampled Class IV students by Gender, Area, and Category is given in Table 8.1, Table 8.2, Table 8.3 and Table 8.4.

It is clear from these tables that there are less girls than boys in the sample drawn. This applies to all the four districts under study. It is the lowest in Jalana district (32.77 %) as compared to 44.21, 46.06, and 48.64 percent in Beed, Dhule, and Gadchiroli districts. This indicates that the enrolment of girls needs immediate attention, particularly in Jalana district.

Table 8.1 : Percentage Distribution of Class IV Students (Genderwise)

District	Boys	Girls	Total
Beed	55.79	44.21	100
Dhule	53.94	46.06	100
Gadchiroli	51.36	48.64	100
Jalana	67.23	32.77	100

Table 8.2 describes the percentage of Class IV students in sampled rural and urban schools. The relative proportion of rural students is higher than those from urban students. It is the highest in Gadchiroli district (76.20%) and the lowest in Jalana (70.38%).

Table 8.2 : Percentage Distribution of Class IV Students (Areawise)

District	Rural	Urban	Total
Beed	75.42	24.58	100
Dhule	70.69	29.31	100
Gadchiroli	76.20	23.80	100
Jalana	70.58	29.42	100

Representation of students from various categories is given in Table 8.3. Students from various categories are unevenly distributed in all the four districts. Majority of students in Beed (64.27%) and Jalana (75.61%) districts belonged to Others category,

whereas the percentage of the students belonging to Others category was considerably low in Dhule (31.90%) and Gadchiroli (8.14%) districts.

Percentage of students belonging to ST category in Beed and Jalana districts is almost negligible. It is the highest in Gadchiroli (41.13%) district followed by Dhule (40.02%) having tribal population.

Efforts are required to attract more students belonging to SC and ST category towards formal school system.

Table 8.3 : Percentage Distribution of Class IV Students (Categorywise)

District	SC	ST	OBC	Others
Beed	15.11	1.84	18.79	64.27
Dhule	8.37	40.02	19.46	31.90
Gadchiroli	11.06	41.13	39.46	8.14
Jalana	14.33	0.46	8.99	75.61

Table 8.4 : Percentage Distribution of Class IV Students on the Basis of Caste and Gender

	SC		ST		OBC		Others	
District	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Beed	7.91	7.20	1.27	0.56	11.30	7.49	35.31	28.95
Dhule	4.43	3.94	22.04	17.98	11.70	7.76	15.76	16.13
Gadchirol	5.22	5.85	20.04	21.09	21.29	18.16	4.80	3.34
Jalana	8.08	6.25	0.30	0.15	6.55	2.44	51.68	23.93

Agewise Distribution

Majority Class IV students were in the 9 and 10 years age interval in all the four districts. A relatively small percentage of over age students (11 years and above) is seen in Table 8.5.

The percentage of over age boys is slightly more than girls. The percentage of over age Class IV students is the highest in Gadchiroli (18.37%) district followed by Jalana (14.64%) district. It is the least in Beed (5.08%) district.

Repetition of a Class by students in lower classes is generally due to poor attendance and poor instruction. It is , therefore , suggested here that steps need to be taken to improve upon these two factors . In-service training programmes for teachers at CPS and BRC levels need to be improved.

Table 8.7 : Percentage Distribution of Class IV Students on the Basis of Educational Level of Parents

District	Educational Status	Father	Mother
Beed	Illiterate	24.01	59.04
	Literate but No Formal Schooling	2.68	1.13
	Primary Education (I-IV)	12.43	11.72
	Secondary Education (V-X)	34.18	20.62
	Higher Secondary (XI-XII)	7.91	1.55
	College	3.95	0.56
	Do not Know / Can not Say	14.83	5.37
Dhule	Illiterate	33.25	51.97
	Literate but No Formal Schooling	2.46	1.60
	Primary Education (I-IV)	9.85	11.08
	Secondary Education (V-X)	24.88	23.28
	Higher Secondary (XI-XII)	9.98	5.05
	College	5.42	0.86
	Do not Know / Can not Say	14.16	6.16
Gadchiroli	Illiterate	32.99	66.60
	Literate but No Formal Schooling	3.76	1.04
	Primary Education (I-IV)	22.13	12.94
	Secondary Education (V-X)	22.55	13.15
	Higher Secondary (XI-XII)	5.22	1.88
	College	1.25	0.42
	Do not Know / Can not Say	11a.90	3.55
Jalana	Illiterate	27.29	65.55
	Literate but No Formal Schooling	7.47	3.81
	Primary Education (I-IV)	17.53	10.21
	Secondary Education (V-X)	30.03	13.11
	Higher Secondary (XI-XII)	4.42	1.83
	College	4.27	0.61
	Do not Know / Can not Say	8.99	4.88

The percentage of parents who can not read , and who can not write is given in Table 8.8. Percentage of fathers (Ranging from 60% to 72%) who can not read is more than mothers (Ranging from 30 % to 44%) who can not read. Reverse is the situation on writing skill. More mothers (Ranging from 55% to 67%) can not write whereas less fathers (Ranging from 25% to 37%) can not write. This needs further study.

Figure 8.7a : Percentage Distribution of Class IV Students on the Basis of Educational Level of Parents (BEED & DHULE)

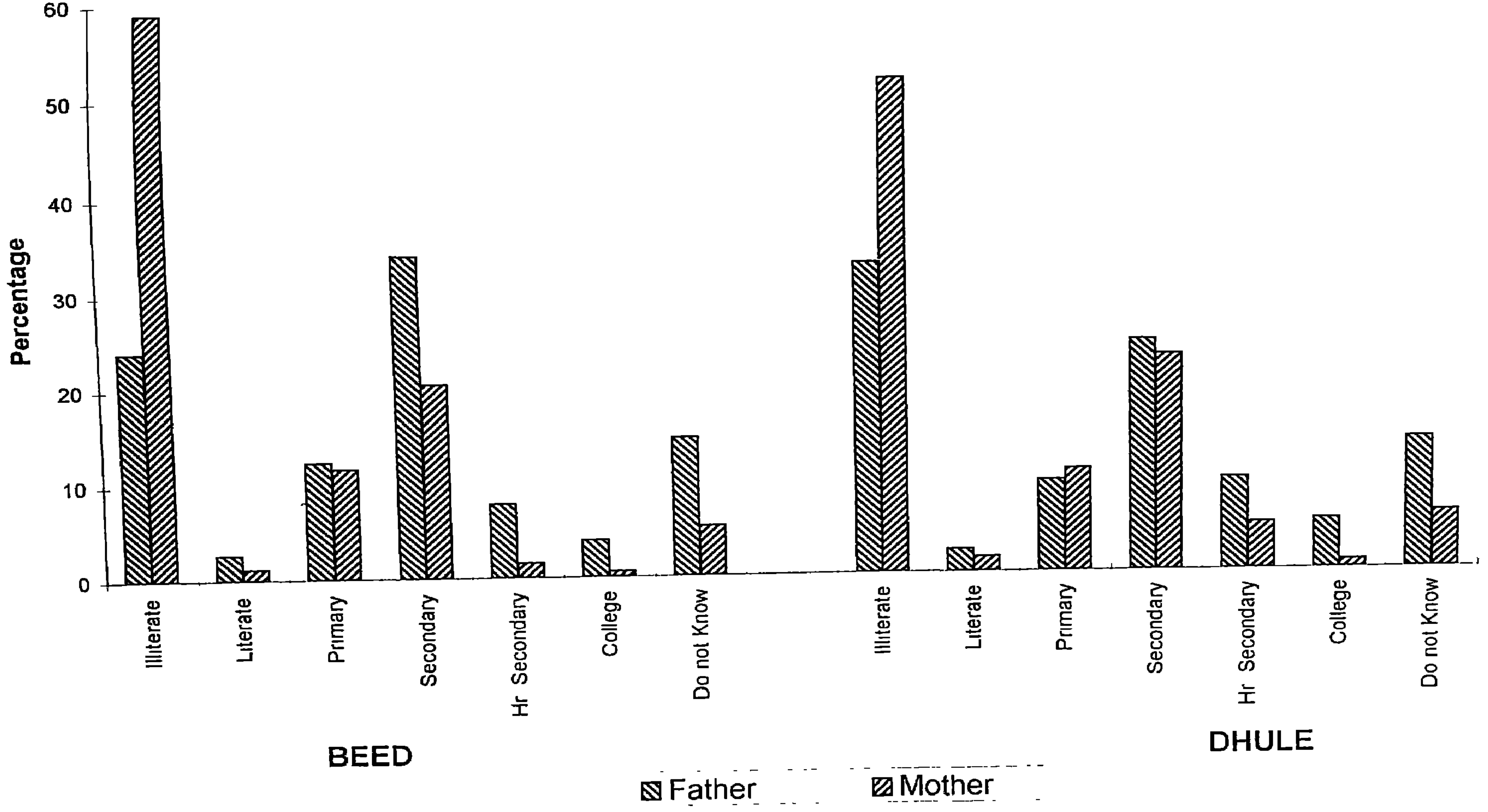


Figure 8.7b : Percentage Distribution of Class IV Students on the Basis of Educational Level of Parents (GADCHIROLI & JALANA)

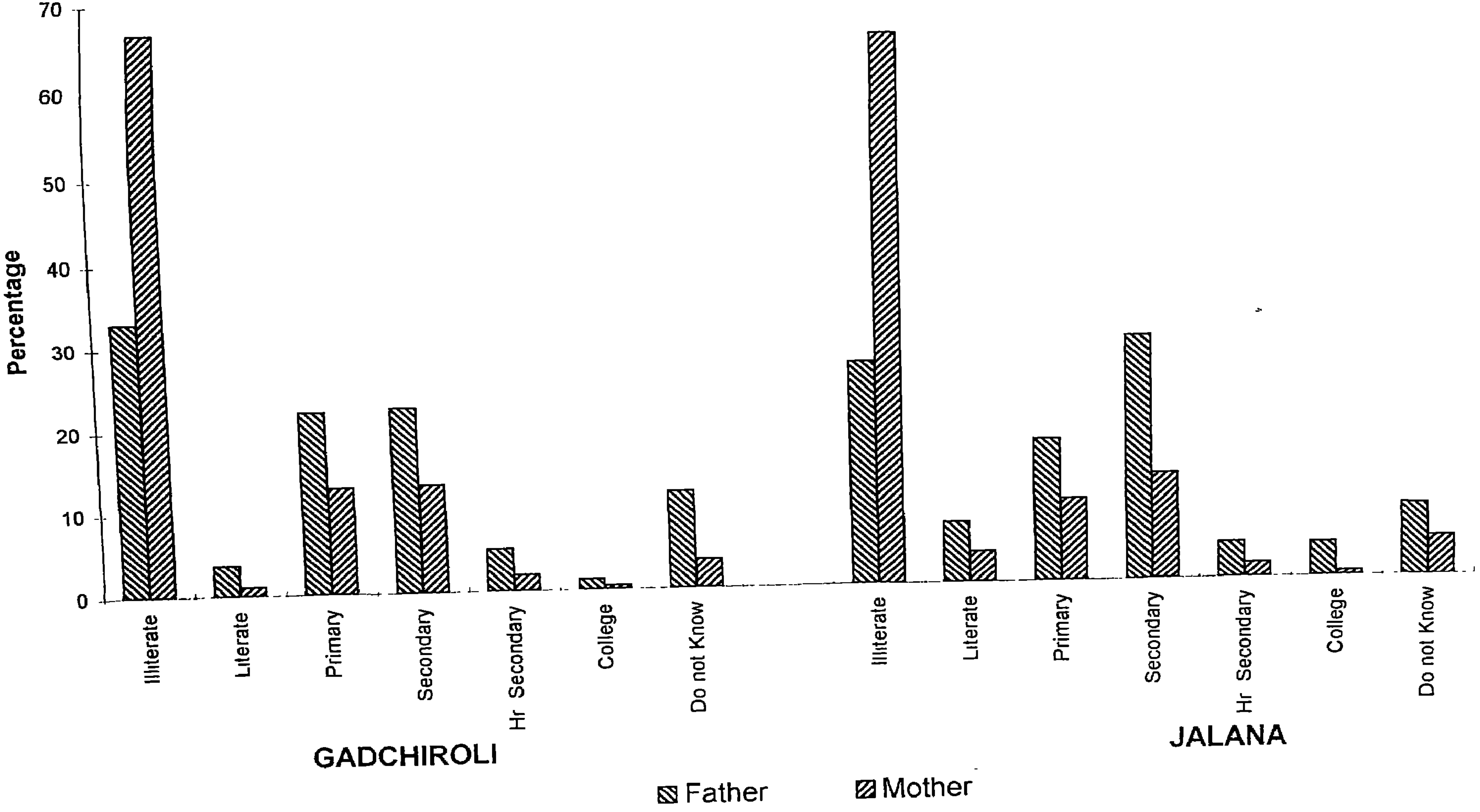


Table 8.8 : Level of Illiteracy Among Parents

District	Who Can not Read Father	Who Can not Read Mother	Who Can not Write Father	Who Can not Write Mother
Beed	72.32	38.14	28.81	63.70
Dhule	61.95	44.46	35.59	55.05
Gadchiroli	60.75	29.85	37.37	67.22
Jalana	66.92	30.64	25.30	63.26

Occupational Status of Father

The sampled Class IV students consistently reported farming as the main occupation of their father (Table 8.9) . The percentage of farmers is the highest in Gadchiroli (59.92%) followed by Jalana (52.59%) district. It is the lowest in Dhule (33.74%) district followed by Beed (45.20%) district. Agricultural Labour seems to be the second major occupation of fathers of students in all the four districts .

Dhule district has the largest (20.20%) number of fathers engaged in agricultural labour. It is interesting to note that a small percentage of fathers who are self employed is seen. It is the highest in Beed (7.91%) followed by Dhule (5.79%). It is negligible in Gadchiroli (1.04%) district.

In short, the sampled Class IV students mainly belonged to parents with an agricultural background. It is also clear from the Table 8.7, Table 8.8 and Table 8.9 that the educational and occupational status of these parents are closely related to each other .

Table 8.9 : Percentage Distribution of Pupils on the Basis of Father's Agricultural Occupation

Occupation	Districts Beed	Dhule	Gadchiroli	Jalana
Household	1.13	0.25	0.00	0.61
Farmer	45.20	33.74	59.92	52.59
Poultry Farming	0.00	0.00	0.21	0.00
Agricultural Labour	5.79	20.20	7.93	7.77
Picking Forest Produce	0.14	0.12	0.21	0.46
Domestic Servant	0.28	0.37	0.00	0.15
Street Vendor	0.28	1.23	0.00	0.91
Manual Unskilled Worker	1.13	3.69	5.64	5.34
Skilled Worker	2.54	5.05	3.13	4.42
Clerical worker	2.40	3.08	2.71	3.35
Self Employment	7.91	5.79	1.04	3.35
Employer /Businessman	1.41	0.25	0.63	0.61
Manager/Senior Officer	1.41	2.09	0.42	0.61
Others	29.94	23.89	17.54	18.90

Table 8.10 shows that most of the mothers are engaged in household work in Beed , Dhule and Gadchiroli districts , whereas quite a high percentage of mothers from Jalana district are doing farming. In short , mothers from the sampled districts are mainly performing traditional role within the household.

Table 8.10 : Percentage Distribution of Pupils on the Basis of Father's (Other than Agriculture) Occupation

Occupation	Districts			
	Beed	Dhule	Gadchiroli	Jalana
Household	76.98	59.73	78.71	35.67
Farmer	10.31	6.53	6.26	45.43
Poultry Farming	0.00	0.00	0.00	0.00
Agricultural Labour	8.62	27.34	8.14	11.59
Picking Forest Products	0.00	0.00	0.21	0.00
Domestic Servant	0.00	0.12	0.00	0.00
Street Vendor	0.00	0.37	0.21	0.15
Manual Unskilled Worker	0.14	0.00	1.25	0.46
Skilled Worker	0.00	0.25	0.00	0.15
Clerical worker	0.00	0.25	0.21	0.00
Self Employment	0.28	0.00	0.00	0.00
Employer /Businessman	0.00	0.00	0.00	0.00
Manager/Senior Officer	0.00	0.00	0.00	0.00
Others	3.53	5.17	4.38	5.64

Economic Status of Household

The economic status of families of the sampled Class IV students is indicated in Table 8.11. It gives the percentage of households possessing various assets like land, animals, own well , electric connections , tube well, etc. Percentage of land owning families is quite high (Ranging from 56.53 to 79.54%) in all the four districts. It is the highest in Gadchiroli district (79.54%) and lowest in Dhule (56.53%).

Almost all households report that they have water (Own Well & or Tube Well) and electric connections . More than 73 % households from Gadchiroli district keep animals as compared to lower number reported in Jalana (66%), Beed (66%) and Dhule (54 %) district. Dhule is the lowest on all counts of assets. It indicates economic backwardness of the district which requires futher study.

Table 8.11 : Percentage Distribution of Class IV Students on the Basis of Ownership of Assets

Assets	Districts			
	Beed	Dhule	Gadchiroli	Jalana
Land	73.59	56.53	79.54	75.61
Animals	66.24	54.43	73.70	66.31
Own Well	43.64	30.30	8.98	52.13
Electric Connections	73.59	56.53	79.54	75.61
Tube Well	73.59	56.53	79.54	75.61

Mean and SD of Land holding and of keeping animals is given in Table 8.12 and Table 8.13 . Gadchiroli district households have the lowest land holding (3.78) mean and highest animal keeping mean (7.48) , whereas the households in Jalana district have the largest land holding mean (9.54) and the households in Dhule district have the lowest animal keeping mean (4.21) .

Table 8.12 : Districtwise Mean and Standard Deviation on the Basis of Land Holding / Owning

Description	Districts			
	Beed	Dhule	Gadchiroli	Jalana
Mean	8.03	5.48	3.78	9.54
SD	9.41	12.34	3.39	14.28
Valid Cases (N)	362	431	274	500

Table 8.13 : Districtwise Mean and Standard Deviation on the Basis of Animals' Ownership

Description	Districts			
	Beed	Dhule	Gadchiroli	Jalana
Mean	4.75	4.21	7.48	5.70
SD	5.56	3.32	8.24	5.90
Valid Cases (N)	469	442	353	435

Table 8.14 : Percentage Distribution of Class IV Students Doing Paid Work

Description	Districts			
	Beed	Dhule	Gadchiroli	Jalana
Performed Paid Labour	0.42	2.46	0.84	2.74

Table 8.14 a : Nature of Work

Type of Work	Districts			
	Beed	Dhule	Gadchiroli	Jalana
Factory Work	0.00	0.00	0.00	0.00
Household Industry / Artisan Work	0.00	0.00	0.21	0.00
Agricultural Work	0.00	0.25	0.00	0.15
Service (Domestic Service/ Shop /Hotel ,Etc)	0.00	0.25	0.00	0.00
Other	0.00	0.00	0.00	0.00

Percentage of Class IV students doing some kind of paid work was very low (Table 8.14) . It was the highest in Jalana district (2.74 %) , followed by Dhule (2.46 %), Gadchiroli (0.84 %) and Beed (0. 42 %)

Table 8.14 tells about the percentage of Class IV students who do some kind of paid labour. A negligible proportion of sampled Class IV students reported that they performed some kind of paid labour (< 2.75%). The data shows that hardly any of the Class IV students do agricultural work. It does not give any indication about its effect on the achievement level of students.

Table 8.15, Table 8.16 and Table 8.17 throw light on Nutritional and Health status of sampled Class IV students. Table 8.15 shows that almost all children (except Dhule) in all the four districts always get sufficient food to eat - three times a day.

A small percentage of students reports that they get sufficient food only sometimes or never . It is rather interesting to note that the children in Dhule district are not getting the meals regularly. Only 52.09 % children get food in the morning. This needs special care and intervention.

Table 8.15 : Nutritional Status of Students of Class IV

Districts	Always			Sometimes			Never		
	M	A	E	M	A	E	M	A	E
Beed	92.80	96.89	99.29	5.51	2.26	0.42	1.41	0.56	0.00
Dhule	52.09	96.80	98.28	27.09	2.71	1.23	20.57	0.25	0.25
Gadchiroli	97.91	89.56	98.54	1.25	8.35	0.84	0.21	1.46	0.00
Jalana	98.78	95.88	98.63	0.15	3.05	0.30	0.00	0.00	0.00

M= Morning; A= Afternoon; E= Evening

Data about health status of the students are given in Table 8.16 & Table 8.17. As regards the health status of the sampled students , a very small proportion of those had any kind of impairment or illness. This might be due to two reasons:

1. Ignorance about the illness, and
2. Students having some kind of impairment / disability or illness were out of the school.

Table 8.16 : Distribution of Class IV Students on the Basis of Physical Impairment

Impairment	Districts			
	Beed	Dhule	Gadchiroli	Jalana
Vision	7	3	6	7
Hearing	2	3	3	2
Speech	12	14	5	6
Limbs	1	9	3	4

It is clear from Table 8.17 that fever is the main cause of illness . Maximum 19 cases who suffered from fever were identified in Dhule district , and only one case in Jalana district was reported. Highest number of children suffering from four illnesses shown in the table were found in Gadchiroli district.

Table 8.17 : Distribution of Class IV Students on the Basis of Illness

Illness	Districts Beed	 Dhule	 Gadchiroli	 Jalana
Fever	6	19	16	1
Asthma	2	1	15	0
Diarrhoea	5	1	4	0
Skin Disease	5	6	11	3

Pre-Schooling

It is said that Pre-schooling has a positive effect on their future achievement of the children in primary school. At least 36 % sampled Class IV children had come from some ICDS/ Nursery / Balwadi centre before enrolling into the formal primary school. Maximum number of sampled students in Class IV (80.17%) had availed of the pre-schooling facility in Gadchiroli district Infrastructure for Pre- schooling in Jalana district seems to be very weak . Creation and expansion of infrastructure for pre-schooling is needed in all the four districts (Table 8.18)

Table 8.18 : Percentage of Class IV Students on the Basis of Pre-School Education

District	Category of School	Percentage of Students
Beed	ICDS/Nursery/Balwadi	53.39
Dhule	ICDS/Nursery/Balwadi	55.05
Gadchiroli	ICDS/Nursery/Balwadi	80.17
Jalana	ICDS/Nursery/Balwadi	36.43

Mother Tongue of Class IV Students

Almost all children in Beed district receive instruction in their mother tongue. It is fairly high in Gadchiroli (69.10%) and Jalana (73.32%) districts , but surprisingly very low in Dhule district (42.49 %).

Table 8.19 shows wider disparities. There are districtwise variations with regard to the medium of instruction in the classroom and the mother tongue of children. This has a direct impact on learning achievement at primary school level. Interventions are required to reduce this kind of disparity particularly in Dhule and Gadchiroli districts.

Table 8.19 : Percentage of Mother tongue and Medium of Instruction

Mother Tongue Same	Districts Beed	 Dhule	 Gadchiroli	 Jalana
Yes	100	42.49	69.10	73.32
No	0.00	57.51	30.90	26.68

Academic Support

About 47% of the sampled Class IV students receive academic support from the members in the family (Table 8.20). Nearly 71% children in Beed district are getting help This shows the concern of their parents to the education of their wards. Efforts are needed in Dhule, Gadchiroli and Jalana districts for creating awareness among the parents about the importance of education. Percentage of girls receiving academic support from their family members is very low in these districts.

Special drive for girls' education is required to be launched in Jalana district.

Table 8.20 : Percentage of Class IV Students Getting Academic Support From the Family

District	Boys	Girls	Total
Beed	37.43	33.47	70.90
Dhule	25.12	21.92	47.04
Gadchiroli	29.02	27.77	56.78
Jalana	42.07	16.92	58.99

Table 8.21 indicates the percentage of help received by students from various members in the family. It is found that the fathers or elder brothers/sisters are two main sources of academic support to students.

Low percentage in case of mothers is certainly linked with high percentage of illiterate women in all the four districts. The data reveals that girls in Jalana district are badly neglected. This throws light on the attitude of parents towards the education of girls. Efforts are needed to suitably improve this situation.

Table 8.21 : Distribution of Class IV Students According to the Assistance Provided by Family Member

District	Gender	Father Guardian	Mother	Elder Brother Sister	Others
Beed	Boys	18.93	6.92	20.48	1.41
	Girls	14.12	6.92	16.24	2.40
Dhule	Boys	13.55	9.48	10.10	1.11
	Girls	12.07	9.48	7.27	1.35
Gadchiroli	Boys	16.70	7.52	12.53	2.30
	Girls	15.66	6.89	12.53	2.30
Jalana	Boys	22.26	9.45	19.05	2.44
	Girls	6.40	2.90	9.45	1.52

Educational Aspiration

The data about educational aspiration of the children are presented in Table 8.22. It reveals that educational aspiration of the sampled Class IV students is quite high in all the four districts. It is worth noting that about less than 3% children - boys and girls both say they would like to stop their study at the end of primary stage.

Majority students want to complete secondary level and a fairly good number of students want to continue further - graduation and above. It means almost all children have positive attitude towards education. It should be boosted through proper interventions. It is to be noted here that educational aspiration of girls in Jalana district is exceptionally low as compared to overall picture in the given context.

Table 8.22 : Percentage Distribution of Students on the Basis of Educational Aspiration

District	Level	Boys	Girls	Total
Beed	Do Not Know/ Do Not Want to Study	1.41	1.98	3.39
	Primary	0.99	2.12	3.11
	Secondary and Hr. Secondary	38.14	32.20	70.34
	Graduation and Above	15.25	7.91	23.16
Dhule	Do Not Know/ Do Not Want to Study	2.71	4.56	7.27
	Primary	1.72	0.99	2.71
	Secondary and Hr. Secondary	33.62	29.43	63.05
	Graduation and Above	15.89	11.08	26.97
Gadchiroli	Do Not Know/ Do Not Want to Study	3.13	5.01	8.14
	Primary	1.67	1.67	3.34
	Secondary and Hr. Secondary	38.62	38.62	77.24
	Graduation and Above	7.93	3.34	11.27
Jalana	Do Not Know/ Do Not Want to Study	2.44	1.52	3.96
	Primary	1.98	3.35	5.34
	Secondary and Hr. Secondary	41.77	20.73	62.50
	Graduation and Above	21.04	7.16	28.20

As the educational aspiration of children is observed quite high, the percentage of children reporting **Reasons For not Intending to Study** is very low - almost negligible.

Table 8.23 : Reasons For not Intending to Study (Percentages)

Reasons	Districts			
	Beed	Dhule	Gadchiroli	Jalana
1. Parents Do not Want to Study	0.00	1.85	0.42	1.22
2. Have to assist in household work	0.00	1.23	0.42	0 46
3. Will have to earn a living	0.14	0.00	0.00	0.00
4. Training in house-hold enterprise	0.00	0.00	0.00	0.00
5. Studies too difficult	0.28	0.25	0.21	0.15
6. Cannot afford Textbooks	0.00	0.00	0.00	0.00
7. Illness / Not keeping well	0.00	0.00	0.00	0.00
8. Failure/ Did not learn anything	0.00	0.00	0.00	0.00
9. Teachers are not helpful	0.00	0.00	0.00	0.15
10. Schools too far	0.00	0.12	0.00	0.30
11. Others	0.00	0.86	0.00	0.00

It is seen from Table 8.24 that out of the sampled children 60 - 80% have 1-3 textbooks and remaining 20 -40 % children have four and more textbooks . Genderwise differences are also seen here .

Table 8.24 : Percentage of Class IV Students on the Basis of Number of Textbooks

District	No. of Books	Rural	Urban	Boys	Girls	Total
Beed	1-3	51.55	10.59	35.17	26.98	62.15
	4 and above	23.87	13.98	20.62	17.23	37.85
Dhule	1-3	45.57	15.52	28.45	32.64	61.08
	4 and above	25.12	13.79	25.49	13.42	38.92
Gadchiroli	1-3	71.19	8.77	41.34	38.62	79.96
	4 and above	5.01	15.03	10.02	10.02	20.04
Jalana	1-3	53.51	19.51	46.95	26.07	73 02
	4 and above	17.07	9.91	20.27	6.71	26.98

A textbook is one of the important learning materials. Following table reveals the status of children having the textbooks . On the whole 96 -99% children have the essential textbooks of Language, Mathematics and Environmental Studies in Beed, Gadchiroli and Jalana district. Situation in Dhule district is slightly different.

A fairly large number of students do not have essential textbooks. Schemes like book bank need to be introduced in schools where such a situation exists. A large percent of girls in Jalana district also are not having textbooks.

Table 8.25 : Percentage of Class IV Students Having Essential Textbooks

District	No. of Books	Rural	Urban	Boys	Girls	Total
Beed	Language	74.58	24.15	55.08	43.64	98.73
	Maths	73.31	24.29	54.66	42.94	97.60
	EVS	73.16	24.44	54.66	42.94	97.60
Dhule	Language	61.70	27.46	48.89	40.27	89.16
	Maths	50.74	26.23	41.75	35.22	76.97
	EVS	58.87	25.86	46.92	37.81	84.73
Gadchiroli	Language	75.78	22.96	50.73	48.02	98.75
	Maths	75.78	22.96	50.73	48.02	98.75
	EVS	75.57	22.55	50.31	47.81	98.12
Jalana	Language	69.05	28.20	65.09	32.16	97.26
	Maths	68.90	28.35	64.94	32.32	97.26
	EVS	67.84	28.35	65.09	31.10	96.19

Table 8.26 reveals that the percentage of children receiving textbooks free from school varies . It is the lowest (50.62%) in Dhule followed by Beed (58.19%) and it is the highest in Jalana (84.15%) district followed by Gadchiroli (73.28%) district.

Table 8.26 : Percentage of Class IV Students on the Basis of Source of Getting Textbooks

Source	Districts			
	Beed	Dhule	Gadchiroli	Jalana
Supplied Free by School	58.19	50.62	73.28	84.15
Used Copies (Brother/ Sister Friend/ Relative)	6.92	13.30	5.43	3.20
Others	30.51	35.84	20.67	11.74

It is reported in Table 8.27 that more than 61% children in rural area and about 35% in urban area purchase textbooks, whereas more than 51 % boys and more than 29% girls buy textbooks on their own. In short , almost all children get textbooks. Percentage of girls having textbooks is reasonably low.

Table 8.27 : Percentage of Class IV Students Who Purchased Textbooks

Districts	No. of Books purchased	Rural	Urban	Boys	Girls
Beed	1739	61.18	38.82	55.66	44.34
Dhule	2111	65.75	34.25	61.39	38.61
Gadchiroli	594	25.76	74.24	50.67	49.33
Jalana	1109	66.91	33.09	71.33	28.67

Table 8.28 : Access of Class IV Students to Reading Material Other than Textbooks

District	Boys	Girls	Total
Beed	10.03	7.06	17.09
Dhule	6.28	4.56	10.84
Gadchiroli	12.32	11.27	23.59
Jalana	15.09	5.34	20.43

On examining the data given in Table 8.28, it becomes clear that besides the required reading materials , 17.09% children in Beed , with 10.84% , 23.43% and 20.43% in Dhule, Gadchiroli and Jalana districts respectively reported having access to other reading material. About 10% of the sampled children have reported to have an access to Newspaper reading (Table 8.29) . Planned efforts are required to be made in the direction of its expansion.

Table 8.29 : Access of Class IV Students to Newspaper

District	Boys	Girls	Rural	Urban	Total
Beed	6.64	3.39	3.67	6.36	10.03
Dhule	4.43	3.08	4.68	2.83	7.51
Gadchiroli	6.26	5.64	4.18	7.72	11.90
Jalana	8.38	2.44	4.12	6.71	10.82

Table 8.30 : Percentages of Class IV Students Reporting Different Instructional Activities in the Classroom (Genderwise)

	Districts							
Instructional	Beed		Dhule		Gadchiroli		Jalana	
Activities	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Reading Aloud	52.82	40.40	51.97	43.84	49.27	46.56	66.31	31.86
Giving Dictation	46.05	38.42	50.49	42.86	47.18	42.80	59.91	28.35
Giving Arithmetic Problem	54.94	43.93	52.09	44.21	50.73	48.23	66.16	32.77
Giving Test Feedback on Tests	48.16	35.03	35.10	29.80	42.59	37.37	64.79	30.79
Giving Homework	52.82	42.80	52.83	44.21	48.02	47.18	66.01	32.77
Correction of Homework	52.40	40.11	50.12	41.38	45.72	43.42	65.85	32.62
Giving Special Help	52.12	39.69	51.48	43.84	46.14	43.01	63.72	32.16
Difficulty in Undererstanding Teacher's Language	55.65	44.21	53.94	45.81	50.94	48.64	66.31	32.77

Table 8.31 :Percentages of Class IV Students Reporting Different Instructional Activities in the Classroom (Areawise)

Instructional Activities	Districts											
	Beed			Dhule			Gadchiroli			Jalana		
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Reading Aloud	69.49	23.73	93.22	68.10	27.71	95.81	72.23	23.59	95.82	69.36	28.81	98.17
Giving Dictation	64.27	20.20	84.46	65.89	27.46	93.35	66.39	23.59	89.98	60.67	27.59	88.26
Giving Arithmetic Problem	74.58	24.29	98.87	68.10	28.20	96.31	75.37	23.59	98.96	70.12	28.81	98.93
Giving Tests	74.15	24.44	98.59	62.07	24.63	86.70	71.61	18.37	89.98	70.12	28.81	98.93
Feedback on Tests	59.04	24.15	83.19	44.83	20.07	64.90	61.59	18.37	79.96	67.07	28.51	95.58
Giving Homework	72.88	22.74	95.62	68.84	28.20	97.04	71.61	23.59	95.20	70.12	28.66	98.78
Correction of Homework	69.63	22.88	92.51	64.41	27.09	91.50	65.55	23.59	89.14	69.82	28.66	98.48
Special Instruction Given to Children	67.80	24.01	91.81	66.75	28.57	95.32	65.76	23.38	89.14	69.05	26.83	95.88
Difficulty in Understanding Teacher's Language	75.42	24.44	99.86	70.69	29.06	99.75	75.99	23.59	99.58	70.27	28.81	99.09

Table 8.32 : Activities in the Absence of Teacher

What is Done When The Teacher is Absent	Districts			
	Beed	Dhule	Gadchiroli	Jalana
Pupils Work Independently	0.56	10.71	14.20	1.83
Another Teacher is Assigned	59.60	49.75	38.62	60.67
Classes are Combined	23.73	30.67	20.88	28.66
Pupils Play or Go Home	10.73	3.82	20.25	7.77

When asked children reported that another teacher engaged the class or classes were combined (Table 8.32) . It seems to be the common practice in almost all schools. Children are given very little time to play or to work independently.

Table 8.33 : Percentage of Class IV Students on the Basis of Detention

District	Once	Twice	Thrice
Beed	7.06	0.56	0.00
Dhule	3.57	0.99	0.00
Gadchiroli	1.46	0.84	0.00
Jalana	9.60	0.61	0.00

A very small percent of children were found to have been detained once (Table 8.33) . No one who has been detained for three times is reported. This does not match with the low achievement level of children Further probe into this area is required.

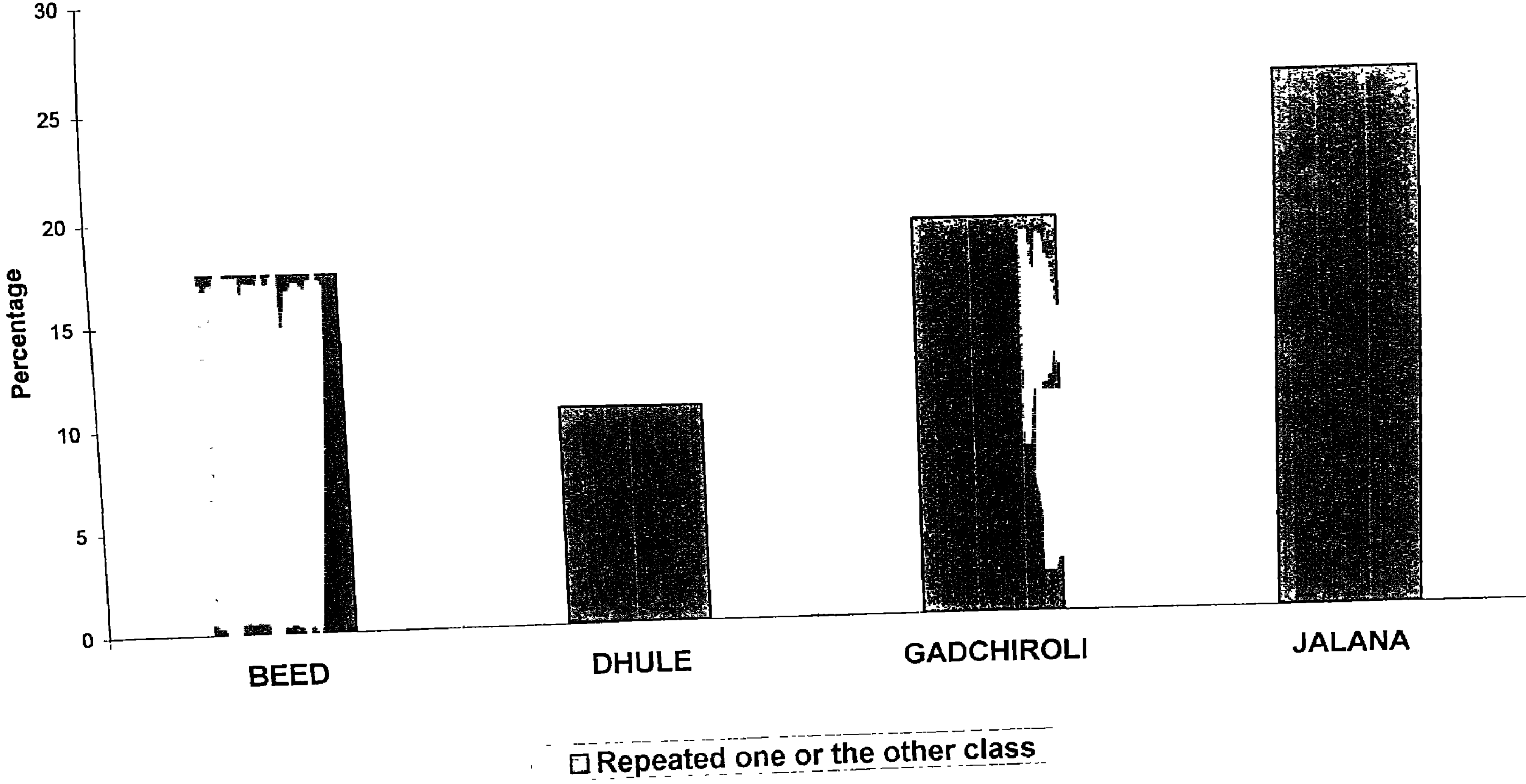
Class Repetition

Table 8.34 : Percentage of Class IV Students on the Basis of Detention in Various Classes

Class	Districts			
	Beed	Dhule	Gadchiroli	Jalana
I	7.63	3.82	2.09	9.91
II	5.08	3.45	3.76	9.60
III	5.79	4.68	15.03	8.23
IV	0.00	0.00	0.00	0.00
Repeated One or the Other Class	17.51	10.71	19.42	25.76

An analysis of class repetition data reveals that repetition rates are nearly the same for all the three districts (Table 8.34 & Figure 8.34). The highest percentage of repetition was seen, when it was further analysed for variations within the classes . A large number of students repeated Class I in Jalana (9.91%) district, whereas it was Class III in Gadchiroli (15%) and again in Jalana (9.60%) district.

Figure 8.34 : Percentage of Class IV Students on the Basis of Detention in Various Classes



Repetition of a Class by students in lower classes is generally due to poor attendance and poor instruction. It is, therefore, suggested in Table 8.34 that steps need to be taken to improve upon these two factors. In-service training programmes for teachers at CPS and BRC levels need to be improved.

Table 8.35 : Categorywise Failure of Students

Class	Districts															
	Beed				Dhule				Gadchiroli				Jalana			
	SC	ST	OBC	Others	SC	ST	OBC	Others	SC	ST	OBC	Others	SC	ST	OBC	Others
I	4	1	6	43	3	11	9	8	2	0	6	2	9	0	6	50
II	4	1	9	22	3	10	6	9	4	5	7	2	7	0	8	48
III	4	3	5	29	2	11	11	14	5	35	29	3	10	0	6	38
IV	0	0	0	00	0	00	00	00	0	00	00	0	00	0	0	00

Percentage of failures in ST category is more in Dhule and Gadchiroli districts, whereas more students from Others category failed in Beed and Jalana districts. This is very much in tune with students enrolled under each category.

CHAPTER 9

ACHIEVEMENT OF CLASS IV STUDENTS

This chapter deals with Class IV students' achievement both in Language and Mathematics taking into consideration their individual characteristics such as area, gender, category , levels of achievement , etc. Besides , it also provides for bivariate frequency distribution, correlation co-efficient between the achievement scores in Language and Mathematics and areas of difficulty in Language and Mathematics both.The information consolidated here dealt with the achievement scores in language and Mathematics. 23 tables explaining various aspects of Learning Achievement of Class IV students were prepared. Tables 9.6 , 9.8 , 9.15 and Table 9.16 are supported by graphs illustrating the data in respective tables.

The assessment of learning achievement has been organised in the following three groups for both Language and Mathematics separately.

1. Mean Achievement Scores
2. Achievement Levels
3. Areas of Difficulty

The achievement levels were defined as :

Zero Level	:	Percentage of students achieving a score of zero
Not Achieving MLL	:	Percentage of students scoring more than zero but less than 40 percent.
Achieving MLL	:	Percentage of students scoring between 40 - 60 percent.
Approaching Mastery	:	Percentage of students scoring between 61- 79 percent.
Mastery level	:	Percentage of students scoring 80 percent and above.

The findings related to achievement of sampled students from Class IV are also explained .

A. Language

The Language Achievement Test (LAT) was administered in two parts : Word Meaning (WM- comprising of 20 items) and Reading Comprehension (RC- comprising of 24 items). It was the standardised test. A detailed description of the test is given in Table 2.5

1. *Mean Achievement Scores*

Mean achievement scores of Class IV students ranged between 17- 20 out of 44 (Table 9.1). Students performed better on Word Meaning than the Reading Comprehension Test (Table 9.2). Dhule had the lowest mean Scores, whereas Beed and Jalana had the highest mean scores.

Table 9.1 : Mean Achievement of Class IV Students in Language

Districts	N	Mean	SD
Beed	708	19.89	6.92
Dhule	812	17.13	6.39
Gadchiroli	479	18.58	6.46
Jalana	656	19.89	6.68

Table 9.2 : Mean Achievement of Class IV Students in Language (Genderwise)

		Boys		Girls		Total		
Area	Districts	Mean	SD	Mean	SD	Mean	SD	Significance
Word Meaning	Beed	10.56	3.46	10.53	3.57	21.09	7.03	0.13
	Dhule	9.58	3.79	9.81	4.00	19.39	7.79	0.84
	Gadchiroli	10.20	3.21	9.73	3.48	19.92	6.69	1.53
	Jalana	11.02	3.28	10.25	3.27	21.27	6.55	2.84
Reading Comprehension	Beed	9.65	4.86	8.96	4.63	18.60	9.48	1.92
	Dhule	7.83	4.19	7.00	3.56	14.83	7.75	3.06
	Gadchiroli	8.84	4.30	8.37	4.36	17.21	8.66	1.18
	Jalana	9.41	4.88	8.53	4.59	17.94	9.48	2.27

Significant differences were seen between boys and girls mean achievement in Language test (Table 9.2) . Differences were in favour of boys in Jalana district in Word Meaning test , whereas in Reading Comprehension test boys and girls showed remarkable differences in Dhule and Jalana districts . Attention to girls' education need to be paid.

Table 9.3 : Mean Achievement of Class IV Students in Language (Areawise)

		Rural		Urban		Total		
Area	Districts	Mean	SD	Mean	SD	Mean	SD	Significance
Word Meaning	Beed	10.41	3.53	10.97	3.42	21.38	6.95	1.85
	Dhule	10.00	3.79	8.92	4.03	18.92	7.82	3.56
	Gadchiroli	9.72	3.34	10.75	3.29	20.47	6.63	2.88
	Jalana	10.60	3.14	11.16	3.61	21.76	6.75	1.87
Reading Comprehension	Beed	8.53	4.17	11.82	5.57	20.36	9.74	7.16
	Dhule	7.46	3.88	7.42	4.06	14.87	7.94	0.14
	Gadchiroli	8.03	3.86	10.49	5.16	18.52	9.02	4.71
	Jalana	9.59	4.14	10.41	5.94	19.00	10.08	3.89

Students in Urban area from all the four districts performed significantly better in both the Word Meaning and Reading Comprehension test than their rural counterparts (Table 9.3). More effective interventions in rural areas need to be planned.

Table 9.4 : Mean Achievement of Class IV Students in Language (Categotywise)

Area	Districts	SC Mean	SC SD	ST Mean	ST SD	OBC Mean	OBC SD	Others Mean	Others SD
Word Meaning	Beed	10.20	3.13	11.62	3.41	10.59	3.56	10.58	3.57
	Dhule	8.63	3.98	9.25	3.93	10.12	3.69	10.29	3.76
	Gadchiroli	10.23	3.73	9.52	3.53	10.28	2.91	10.62	3.27
	Jalana	10.02	3.68	8.33	5.44	10.86	2.98	10.76	3.17
Reading Comprehension	Beed	8.29	3.99	8.31	3.41	9.59	5.61	9.55	4.66
	Dhule	7.04	3.81	6.85	3.19	7.63	4.49	8.24	4.27
	Gadchiroli	8.94	4.46	7.39	3.56	9.53	4.63	10.10	4.44
	Jalana	9.30	4.81	8.33	3.30	9.66	5.02	9.05	4.76

Categorywise analysis of scores revealed that students from OBC and Others category did not show significant differences in their mean achievement scores in both Word Meaning and Reading Comprehension test (Table 9.5). However, they differed significantly from students belonging to SC and ST category. ST students in Dhule and Gadchiroli districts had lower mean scores than the mean scores of students belonging to OBC and Others category.

Table 9.5 : Level of Significance of Class IV Students in Language (Castewise)

Area	Districts	SC & ST	SC & OBC	SC & Others	ST & OBC	ST & Others	OBC & Others
Word Meaning	Beed	1.43	0.92	1.15	1.03	1.04	0.02
	Dhule	1.17	2.63	2.78	2.37	2.81	0.41
	Gadchiroli	1.23	0.09	0.07	2.29	3.16	1.07
	Jalana	0.85	0.29	0.39	0.80	0.77	0.18
Reading Comprehension	Beed	0.02	2.09	2.93	1.20	1.21	0.06
	Dhule	0.40	1.00	1.09	1.96	3.63	1.24
	Gadchiroli	2.34	0.85	0.63	5.08	6.60	1.22
	Jalana	0.49	0.44	0.67	0.66	0.36	0.68

2. Achievement Level

It is observed that only 6 to 15 percent students from all the four districts could achieve MLL. This percentage was the highest in Beed, whereas it was the least in Dhule district (Table 9.6). In short, a large number of students failed to achieve the MLL.

Table 9.6 : Percentage of Class IV Students on Different Levels of Achievement in Language

Levels	Districts Beed	Dhule	Gadchiroli	Jalana
Zero	39.12	56.53	48.23	39.33
NO MLL	42.51	35.34	39.67	44.82
Achieving MLL	14.83	6.40	10.23	12.65
Approaching Mastery	3.95	1.72	1.88	3.35

Figure 9.6 : Percentage of Class IV Students on Different Levels of Achievement in language

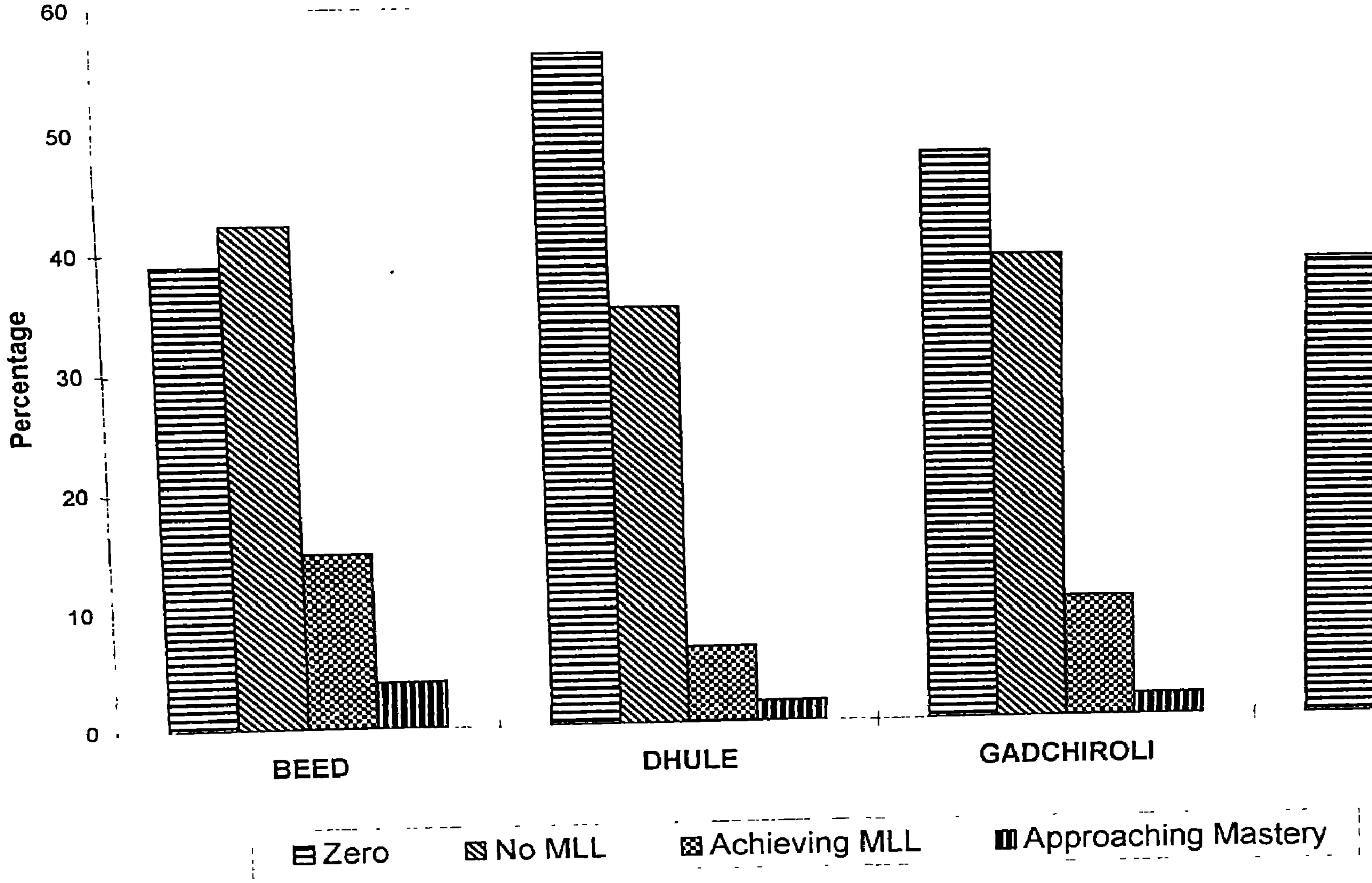


Figure 9.6a : Scorewise Distribution of Class IV Students
on Language Achievement Test
(Beed)

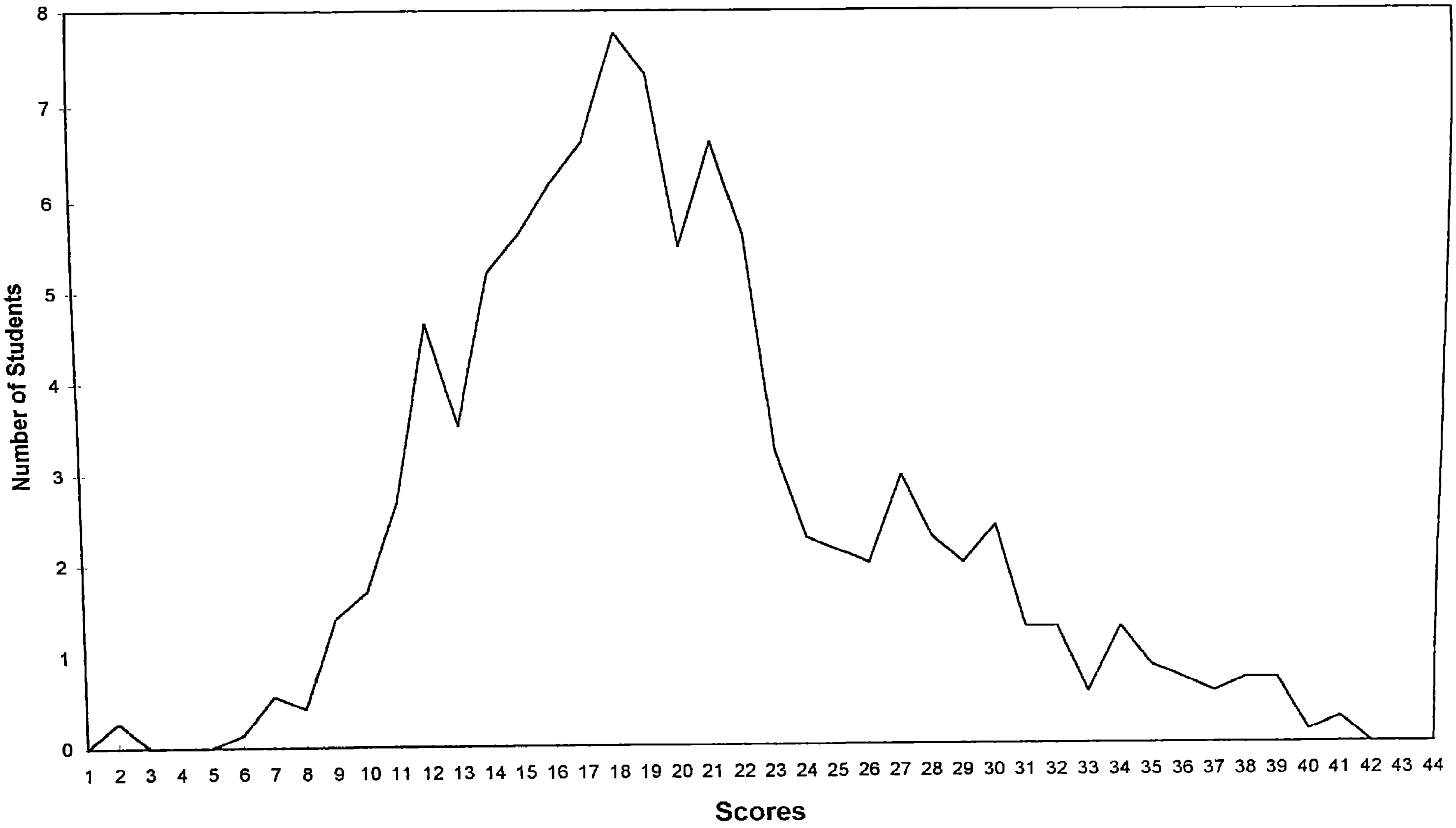


Figure 9.6b : Scorewise Distribution of Class IV Students on Language Achievement Test (DHULE)

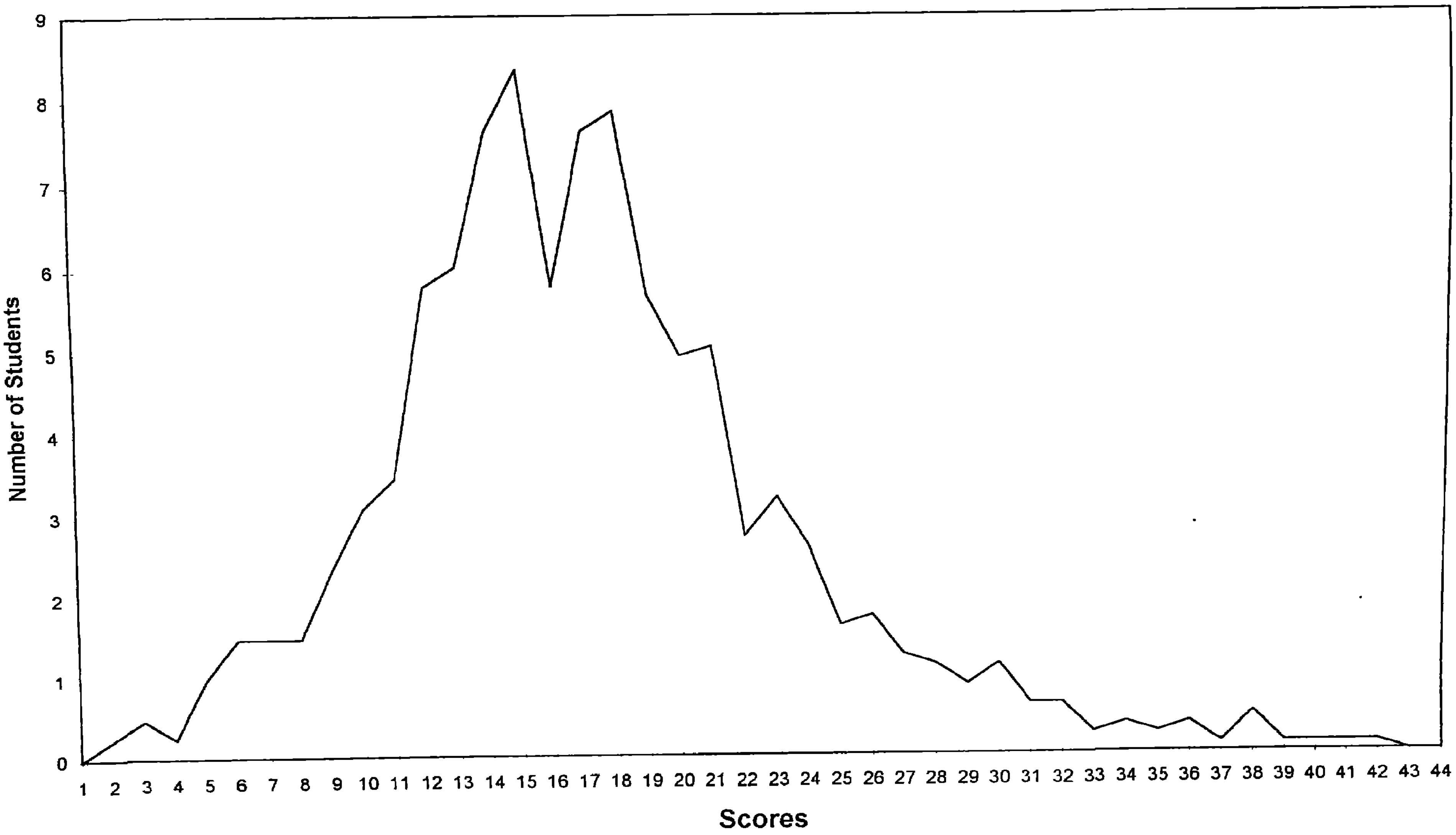


Figure 9.6c : Scorewise Distribution of Class IV Students on Language Achievement Test (GADCHIROLI)

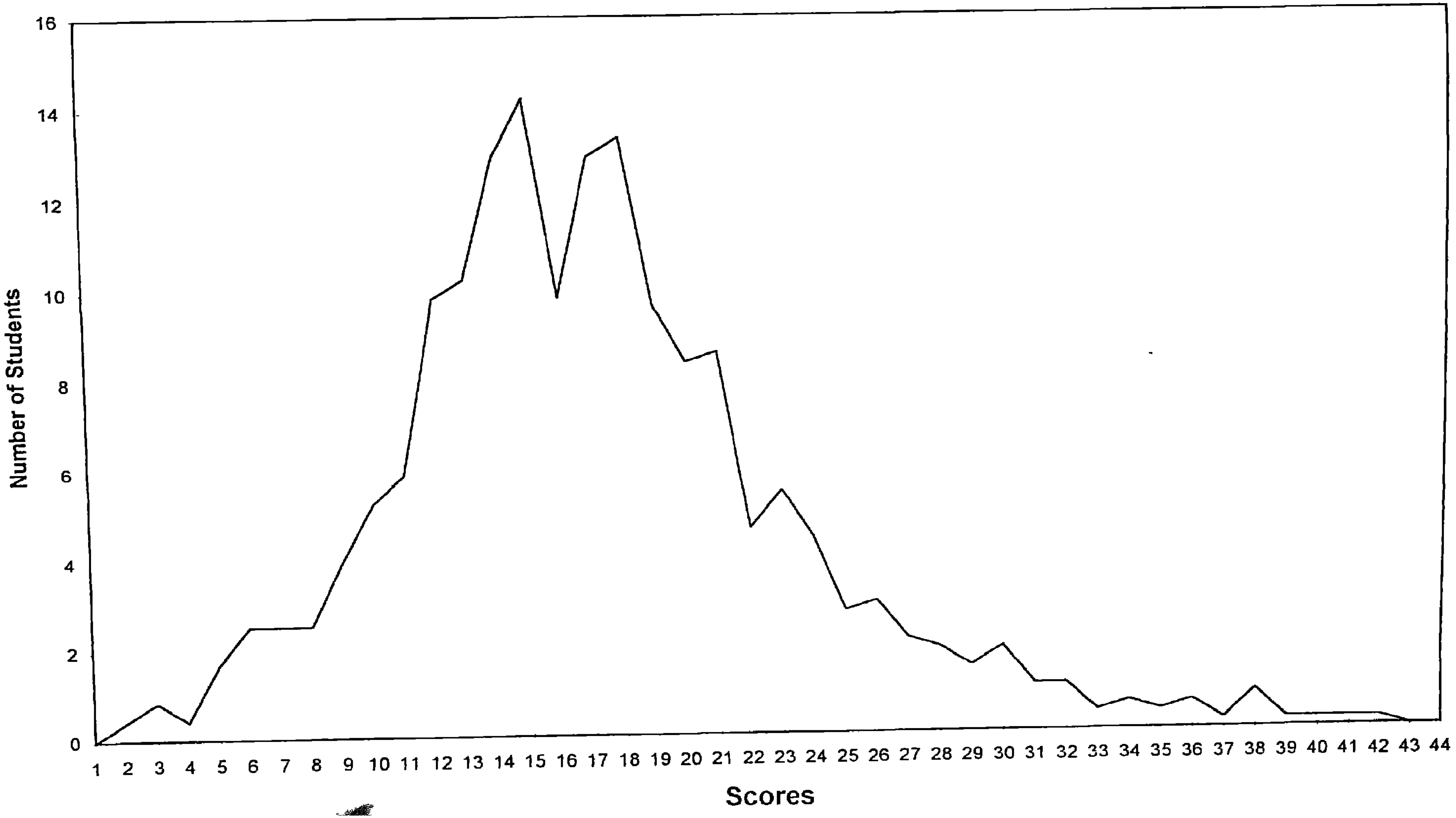


Figure 9.6d : Scorewise Distribution of Class IV Students on Language Achievement Test (JALANA)

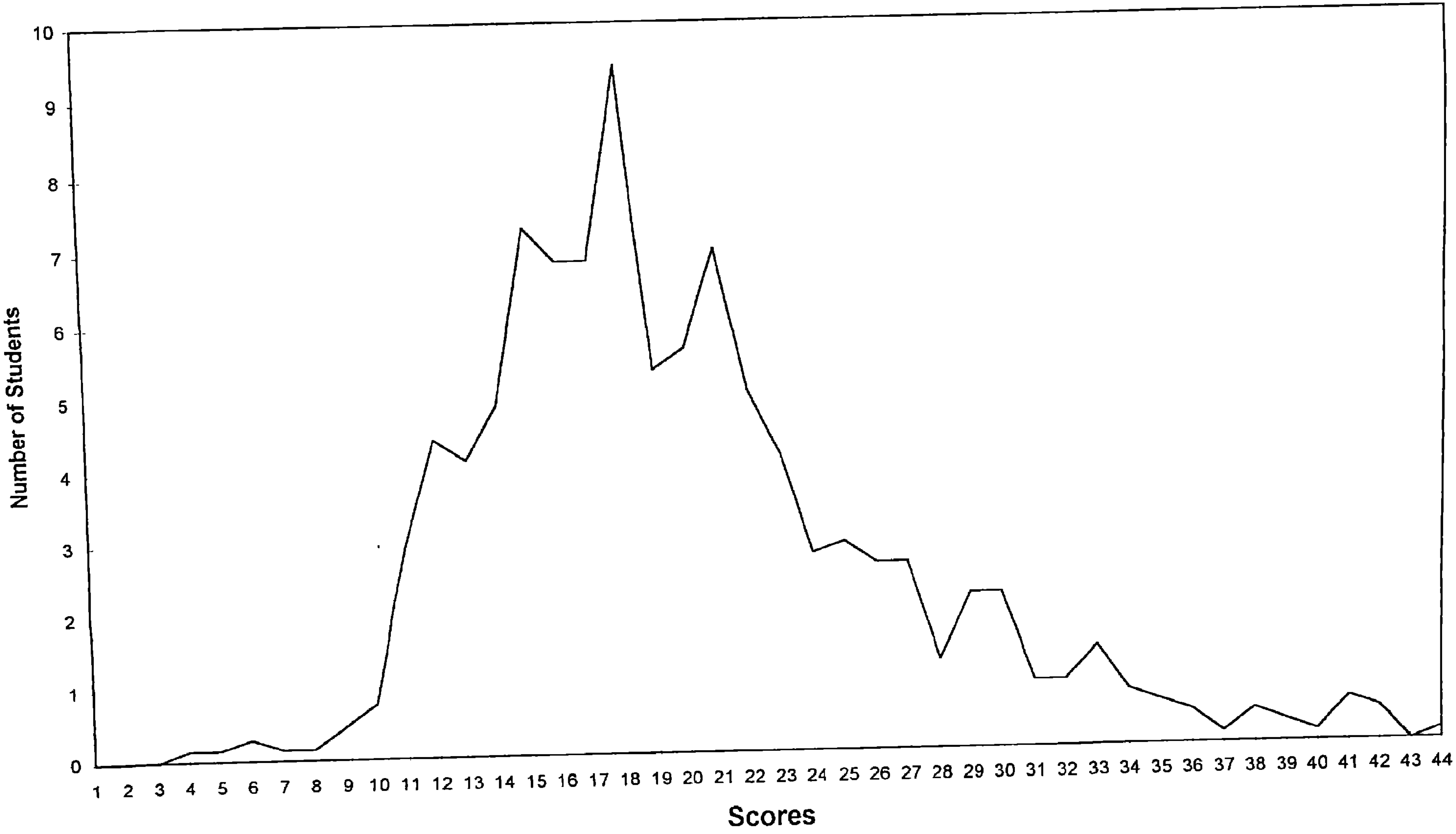


Table 9.7: Percentage of Class IV Students on Different Levels of Achievement in Language(Genderwise)

Area	Levels	Districts											
		Beed			Dhule			Gadchiroli			Jalana		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Word Meaning	Zero	0.14	0.42	0.56	0.37	0.99	1.35	0.00	0.42	0.42	0.46	0.00	0.46
	No MLL	10.31	9.32	19.63	15.64	11.33	26.97	10.65	12.32	22.96	9.45	7.01	16.46
	AchievingMLL	28.67	20.48	49.15	24.88	20.57	45.44	27.77	24.22	51.98	34.45	16.62	51.07
	Approaching Mastery	12.71	10.73	23.45	10.59	10.84	21.43	10.86	9.81	20.67	18.29	7.47	25.76
	Achieving Mastery	3.95	3.25	7.20	2.46	2.34	4.80	2.09	1.88	3.97	4.57	1.68	6.25
Reading Comprehension	Zero	0.28	0.42	0.71	0.49	0.12	0.62	0.21	0.63	0.84	0.76	0.00	0.76
	No MLL	32.77	28.67	61.44	40.27	38.79	79.06	33.19	33.19	66.39	41.16	22.56	63.72
	Achieving MLL	13.14	8.62	21.75	8.87	5.30	14.16	11.48	10.23	21.71	14.02	6.40	20.43
	Approaching Mastery	6.50	4.80	11.30	3.45	1.35	4.80	5.64	3.13	8.77	7.32	2.29	9.60
	Achieving Mastery	4.24	2.40	6.64	1.48	0.86	2.34	1.67	2.09	3.76	5.34	1.68	7.01

Table 9.8 : Percentage of Class IV Students on Different Levels of Achievement in Language (Areawise)

Area	Levels	Districts											
		Beed			Dhule			Gadchiroli			Jalana		
		Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Word Meaning	Zero	0.42	0.14	0.56	0.62	0.74	1.35	0.21	0.21	0.42	0.00	0.46	0.46
	No MLL	16.38	3.25	19.63	17.86	9.11	26.97	19.00	3.97	22.96	12.65	3.81	16.46
	AchievingMLL	35.73	13.42	49.15	31.90	13.55	45.44	40.92	11.06	51.98	37.20	13.87	51.07
	Approaching Mastery	18.36	5.08	23.45	16.63	4.80	21.43	13.99	6.68	20.67	16.92	8.84	25.76
	Achieving Mastery	4.52	2.68	7.20	3.69	1.11	4.80	2.09	1.88	3.97	3.96	2.29	6.25
Reading Compre-hension	Zero	0.71	0.00	0.71	0.37	0.25	0.62	0.63	0.21	0.84	0.00	0.76	0.76
	No MLL	51.84	9.60	61.44	56.03	23.03	79.06	55.11	11.27	66.39	48.48	15.24	63.72
	AchievingMLL	14.12	7.63	21.75	9.98	4.19	14.16	14.41	7.31	21.71	14.79	5.64	20.43
	Approaching Mastery	7.20	4.10	11.30	3.33	1.48	4.80	5.22	3.55	8.77	5.79	3.81	9.60
	Achieving Mastery	2.40	4.24	6.64	1.60	0.74	2.34	1.46	2.30	3.76	2.90	4.12	7.01

Areawise differences were also observed in Word Meaning and Reading Comprehension test. More than 60 percent students remained at NO MLL level of achievement (Table 9.8). A negligible percentage of students achieved mastery in all the four districts.

Figure 9.8a : Percentage of Class IV Students on Different Levels of Achievement in Language - Word Meaning (WM) (Areawise)

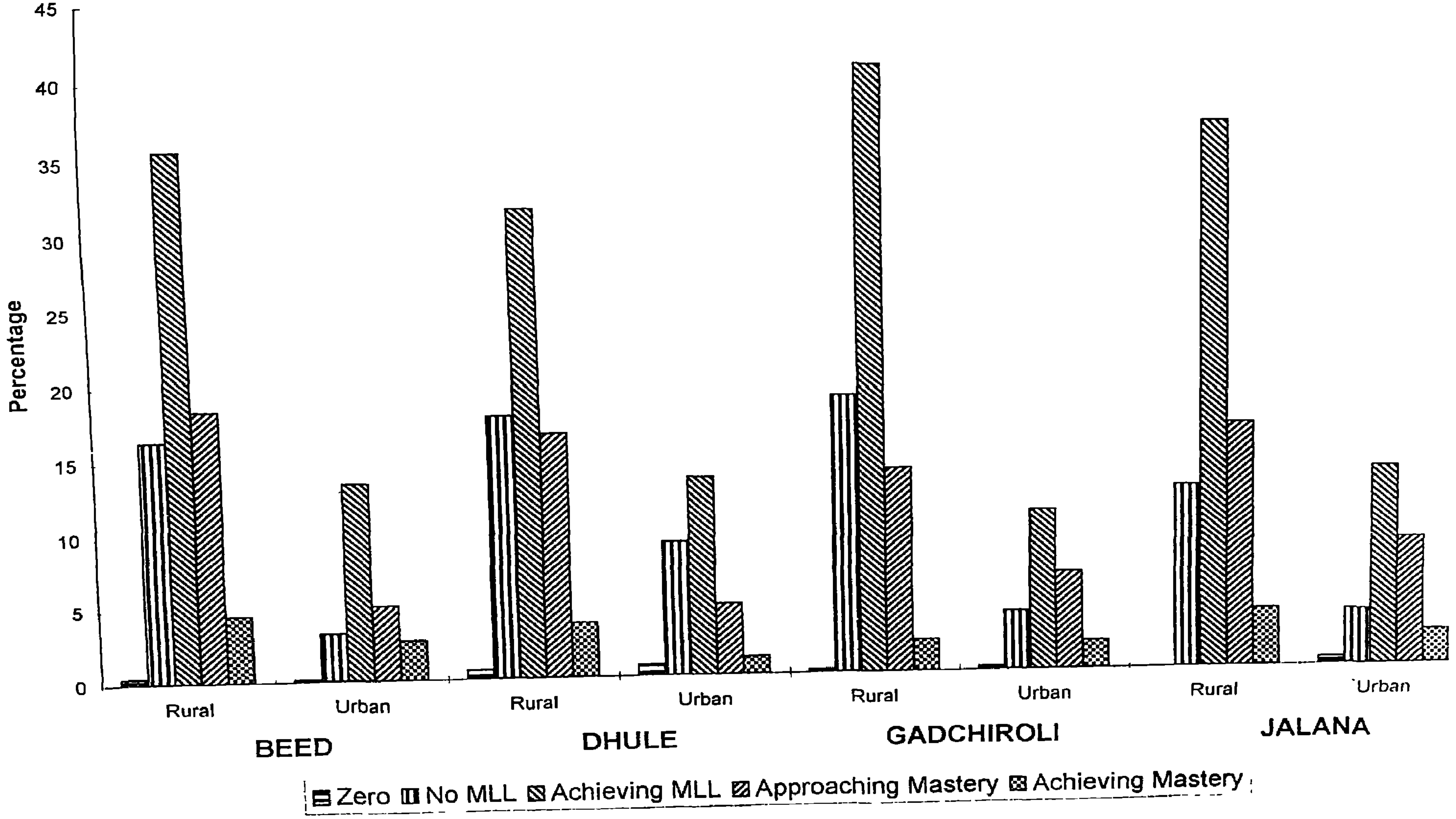


Figure 9.8b : Percentage of Class IV Students on Different Levels of Achievement in Language - Reading Comprehension (RC) (Areawise)

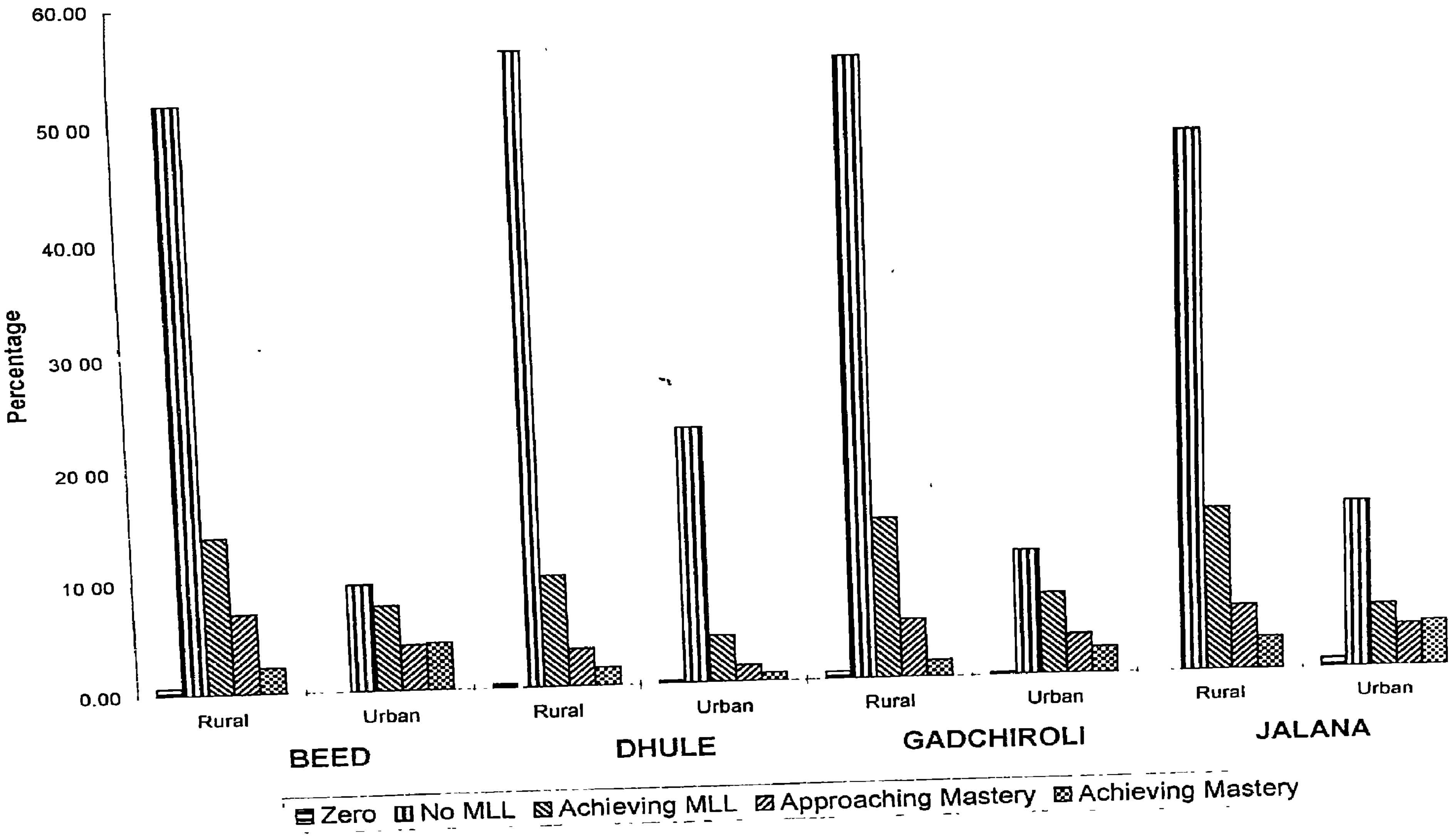


Table 9.9 : Percentage of Class IV Students on Different Levels of Achievement in Language (Categorywise)

Area	Levels	Districts															
		Beed				Dhule				Gadchiroli				Jalana			
		SC	ST	OBC	Others	SC	ST	OBC	Others	SC	ST	OBC	Others	SC	ST	OBC	Others
Word Meaning	Zero	0.00	0.00	0.14	0.42	0.37	0.25	0.25	0.49	0.00	0.21	0.00	0.00	0.15	0.00	0.00	0.00
	No MLL	3.11	0.28	3.67	12.57	2.46	13.67	4.06	6.53	2.92	11.69	6.89	1.46	2.59	0.15	1.37	12.35
	Achieving MLL	8.19	0.71	9.18	31.07	4.06	17.00	9.36	15.02	4.59	20.25	23.17	3.97	6.55	0.15	4.73	39.48
	Approaching Mastery	3.25	0.71	4.24	15.25	1.11	7.27	5.05	8.00	2.71	8.35	7.72	1.88	3.51	0.15	2.59	19.36
	Achieving Mastery	0.56	0.14	1.55	4.94	0.37	1.85	0.74	1.85	0.84	0.63	1.67	0.84	1.52	0.00	0.30	4.42
Reading Comprehension	Zero	0.00	0.00	0.42	0.28	0.00	0.25	0.25	0.12	0.00	0.21	0.42	0.00	0.30	0.00	0.00	0.15
	No MLL	10.31	1.55	11.16	38.42	6.90	34.61	14.78	22.54	7.10	31.94	22.96	4.38	8.23	0.30	5.49	49.70
	Achieving MLL	3.67	0.14	3.25	14.69	0.86	4.31	2.46	6.53	2.71	7.10	10.23	1.67	3.51	0.15	1.98	14.63
	Approaching Mastery	0.71	0.14	2.54	7.91	0.62	0.62	1.48	2.09	1.04	1.67	4.18	1.88	1.68	0.00	0.76	7.01
	Achieving Mastery	0.42	0.00	2.26	3.95	0.00	0.49	0.74	1.11	0.63	0.63	2.09	0.42	0.76	0.00	0.76	5.49

Table 9.9 shows that majority of students from all categories are at the No MLL level of achievement. This indicates poor quality of language teaching .

On examining the achievement levels in Language with respect to gender, area and category , Tables 9.7 , 9.8 and 9.9 reveal that more girls than boys could not achieve MLLs.

B. Mathematics

Standard Achievement Tests developed by the NCERT were translated in Marathi and were administered to the sampled Class IV students in the four districts under study. A detailed information about items in the test is given in Table 2.6.

1. Mean Achievement Scores

The mean achievement scores in Mathematics in all the four districts were extremely low at 11.91 out of 40. It was lower than the achievement in language. There was not much variation in the mean achievement of students in Beed (13.62%), Gadchiroli (14%) and Jalana (14.27%) .But it was surprisingly low in Dhule (11.91%) district (Table 9.10).

Table 9.10 : Mean Achievement of Class IV Students in Mathematics

Districts	N	Mean	SD
Beed	708	13.62	5.01
Dhule	812	11.91	5.30
Gadchiroli	479	14.04	6.01
Jalana	656	14.27	5.09

Gender differentials in favour of boys were seen in all the districts , with significant differences in Beed and Dhule districts (Table 9.11) .

Table 9.11 : Mean Achievement of Class IV Students in Mathematics (Genderwise)

	Boys		Girls		Total		
Districts	Mean	SD	Mean	SD	Mean	SD	Significance
Beed	14.01	5.48	13.13	4.29	27.14	9.78	2.39
Dhule	12.25	5.67	11.50	4.79	23.75	10.47	2.06
Gadchiroli	14.15	6.07	13.92	5.94	28.07	12.01	0.42
Jalana	14.40	5.28	13.99	4.66	28.39	9.94	1.03

Students from urban schools performed better than the rural students (Table 9.12). The differences were found to be significant in Beed, Gadchiroli and Jalana districts.

In Dhule district , rural and urban students did not differ significantly from each other in their mean achievement scores in Mathematics. This needs further study.

Table 9.12 : Mean Achievement of Class IV Students in Mathematics (Areawise)

Districts	Rural		Urban		Total		
	Mean	SD	Mean	SD	Mean	SD	Significance
Beed	12.78	4.27	16.22	6.10	28.99	10.37	6.91
Dhule	11.87	5.16	11.98	5.63	23.86	10.78	0.26
Gadchiroli	12.72	5.21	18.25	6.44	30.97	11.65	8.36
Jalana	13.76	4.41	15.49	6.27	29.25	10.68	3.50

Table 9.13 : Mean Achievement of Class IV Students in Mathematics (Categorywise)

Districts	SC		ST		OBC		Others	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Beed	12.50	4.27	12.15	2.80	14.36	5.72	13.71	4.95
Dhule	11.91	5.35	11.02	4.60	12.56	5.51	12.60	5.81
Gadchiroli	14.66	6.19	11.91	4.94	15.39	6.17	17.33	6.36
Jalana	14.17	5.44	14.67	1.70	14.54	5.05	14.31	4.97

Table 9.14 : Level of Significance of Class IV Students in Mathematics (Categorywise)

Districts	SC & ST	SC & OBC	SC & Others	ST & OBC	ST & Others	OBC & Others
Beed	0.40	2.88	3.92	2.40	1.76	0.99
Dhule	1.28	0.83	0.88	3.04	2.99	0.06
Gadchiroli	2.99	0.75	0.55	6.10	9.34	3.02
Jalana	0.44	0.43	0.62	0.11	0.31	0.26

There were categorywise variations in the mean achievement scores of sampled Class IV students in all the districts. More variations were seen in Gadchiroli district between SC & ST ; ST & OBC ; ST & Others and OBC & Others (Table 9.14). Group specific intervention strategies need to be planned in these districts.

2. Achievement Levels

Analyses of achievement level of sampled Class IV students in Mathematics were carried out . It revealed that the percentage of students having NO MLL was quite high. Percentage of students achieving Mastery was almost nil. Only a negligible range of 1.97 percent to 5.22 percent students were approaching the mastery level (Table 9.15). As majority of students were at the NO MLL level , immediate intervention is a necessity.

Table 9.15 : Percentage Distribution of Students on the Basis of Levels of Achievement in Mathematics (Genderwise)

	Districts											
	Beed			Dhule			Gadchiroli			Jalana		
Levels	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Zero	0.00	0.00	0.00	0.12	0.25	0.37	0.21	0.21	0.42	0.46	0.15	0.61
NO MLL	36.16	32.77	68.93	40.39	37.19	77.59	32.99	33.61	66.60	43.90	22.56	66.46
Achieving MLL	16.67	10.88	27.54	11.70	8.25	19.95	15.03	11.90	26.93	19.21	8.84	28.05
Approaching Mastery	2.54	0.56	3.11	1.60	0.37	1.97	2.92	2.30	5.22	3.05	1.22	4.27
Achieving Mastery	0.42	0.00	0.42	0.12	0.00	0.12	0.21	0.63	0.84	0.61	0.00	0.61

Figure 9.15 : Percentage Distribution of Students on the Basis of Levels of Achievement in Mathematics (Genderwise)

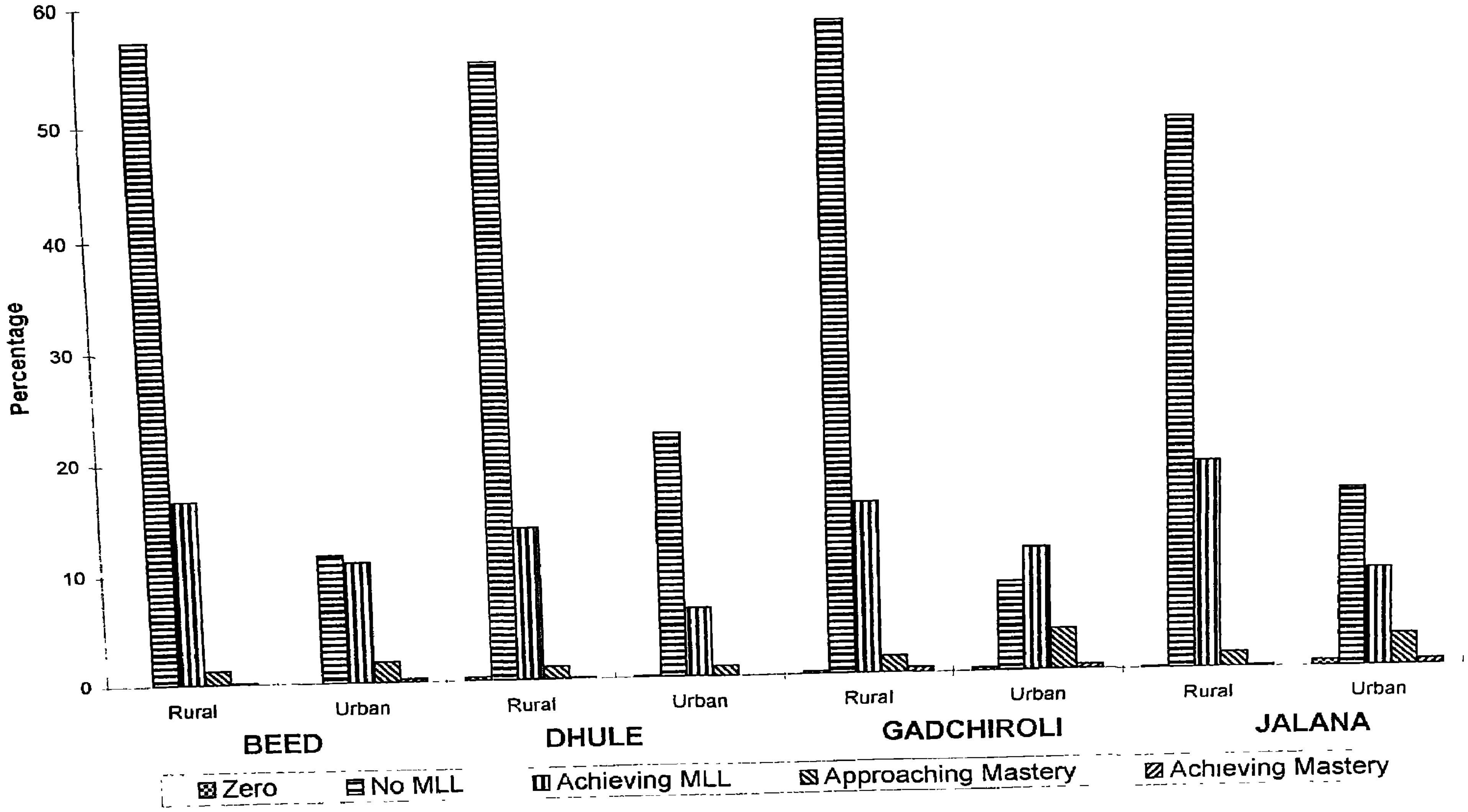


Figure 9.15a : Scorewise Distribution of Class IV Students on Mathematics Achievement Test (BEED)

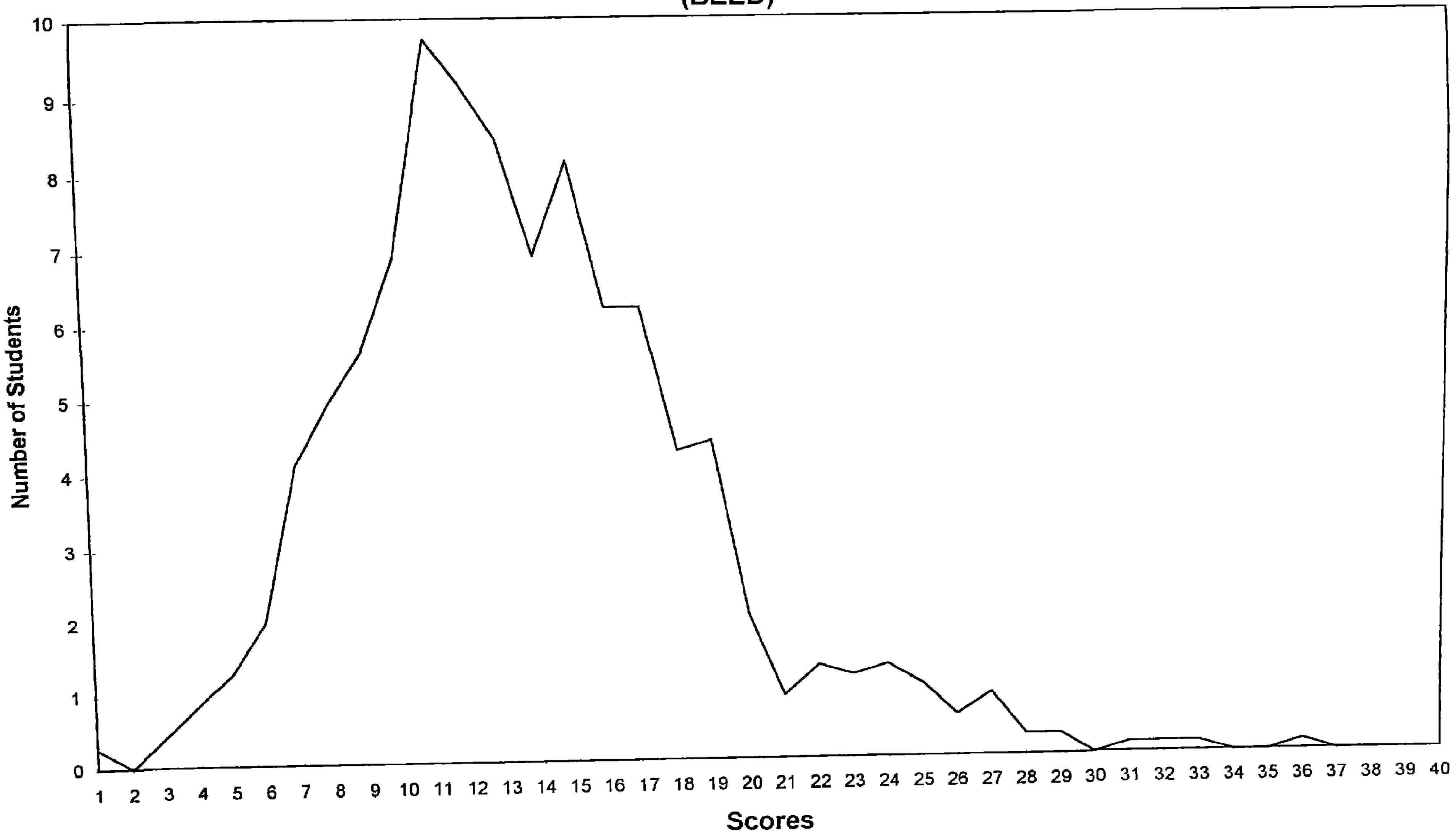


Figure 9.15b : Scorewise Distribution of Class IV Students on Mathematics Achievement Test (DHULE)

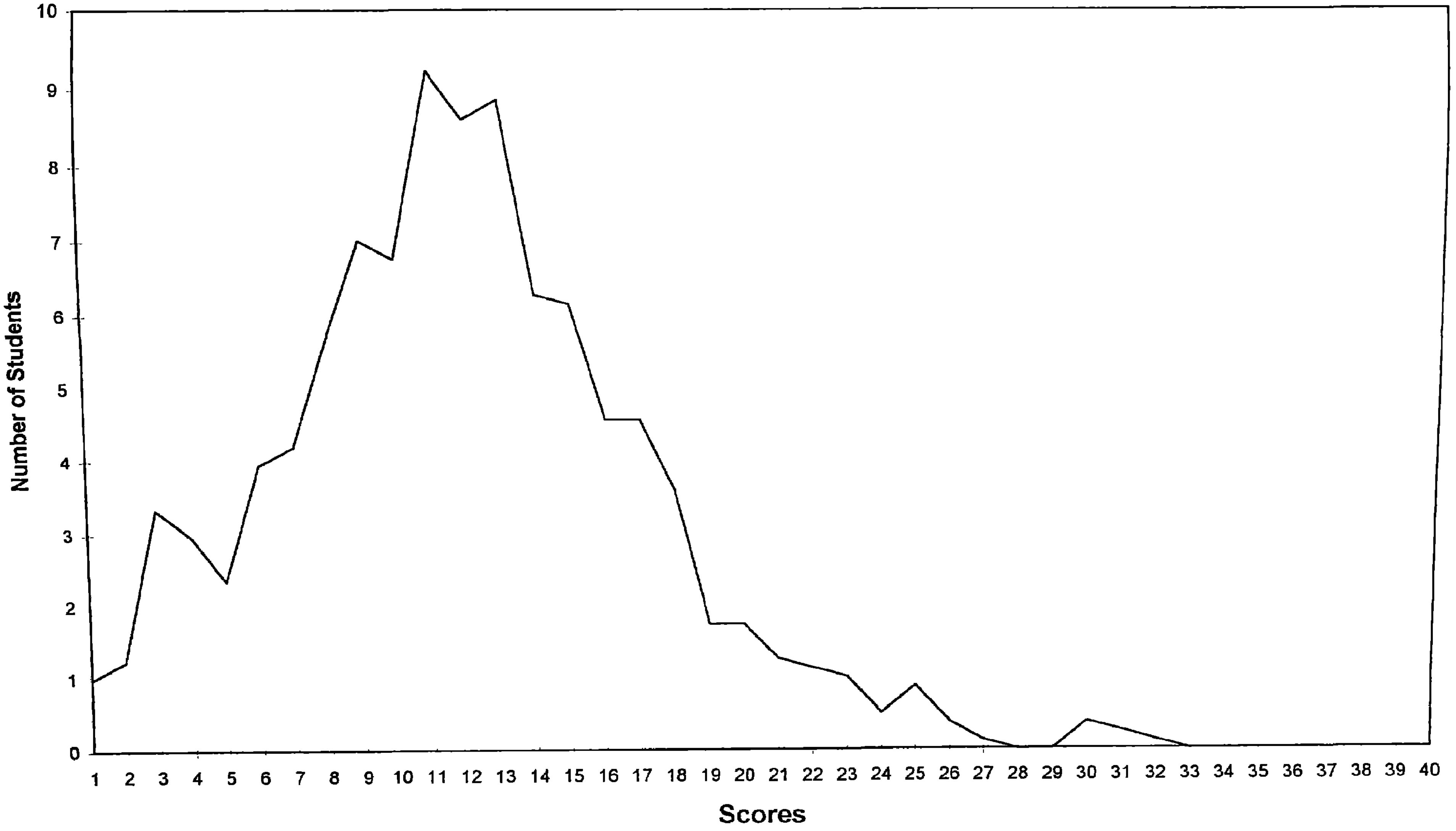


Figure 9.15c : Scorewise Distribution of Class IV Students on Mathematics Achievement Test (GADCHIROLI)

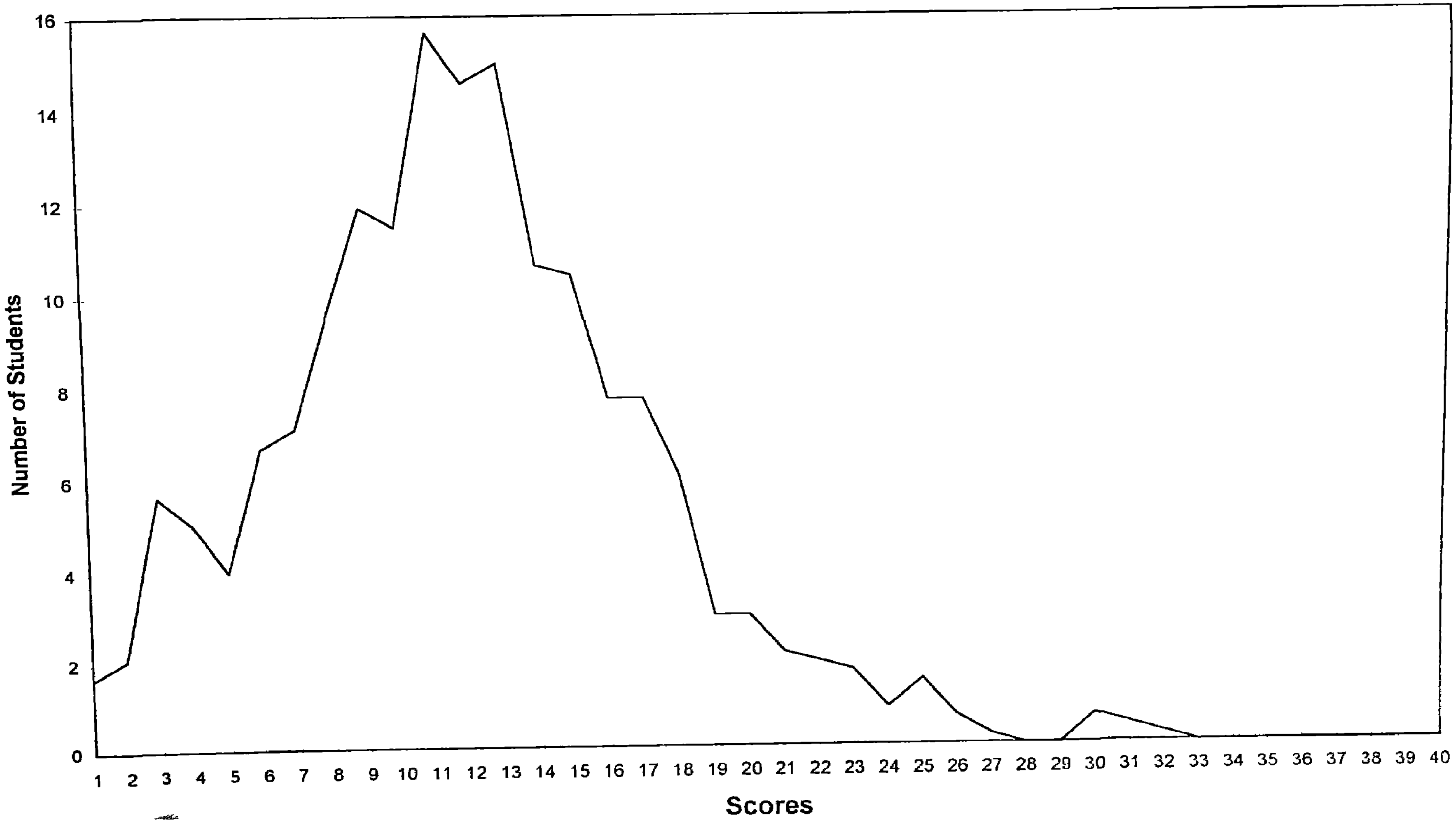


Figure 9.15d : Scorewise Distribution of Class IV Students on Mathematics Achievement Test (JALANA)

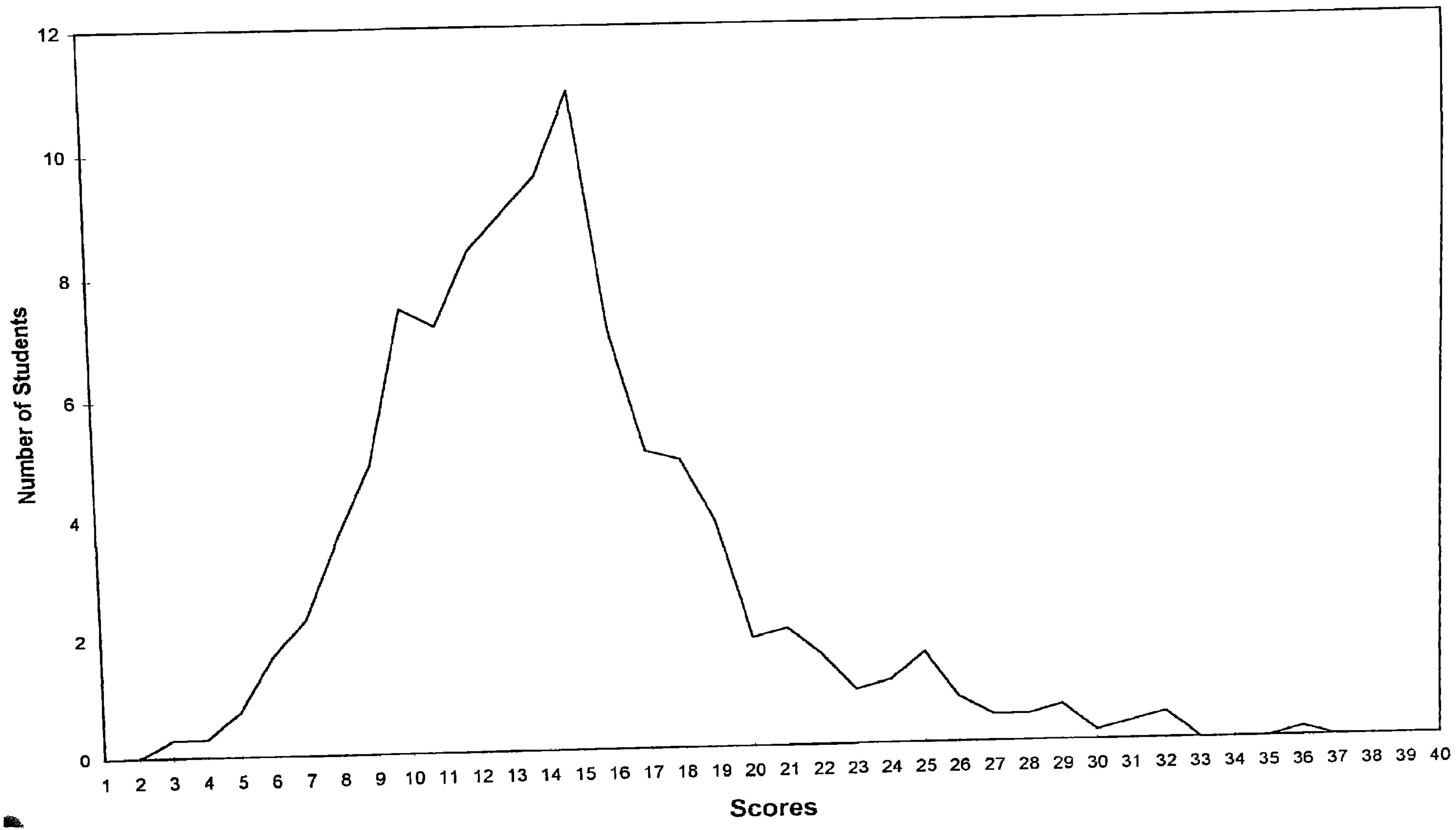


Table 9.16 : Percentage Distribution of Students on the Basis of Levels of Achievement in Mathematics (Areawise)

Levels	Districts											
	Beed			Dhule			Gadchiroli			Jalana		
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Zero	0.00	0.00	0.00	0.25	0.12	0.37	0.21	0.21	0.42	0.15	0.46	0.61
NO MLL	57.34	11.58	68.93	55.42	22.17	77.59	58.46	8.14	66.60	50.00	16.46	66.46
Achieving MLL	16.67	10.88	27.54	13.79	6.16	19.95	15.66	11.27	26.93	19.05	8.99	28.05
Approaching Mastery	1.27	1.84	3.11	1.11	0.86	1.97	1.46	3.76	5.22	1.37	2.90	4.27
Achieving Mastery	0.14	0.28	0.42	0.12	0.00	0.12	0.42	0.42	0.84	0.15	0.46	0.61

Achievement level of rural students was found better than the urban students (Table 9.16). Percentage of students having NO MLL level was seen to be very high . It was the highest in Dhule district (77.59%) followed by Beed (68.93%).

Figure 9.16 : Percentage Distribution of Class IV Students on the Basis of Leves of Achievement in Mathematics (Areawise)

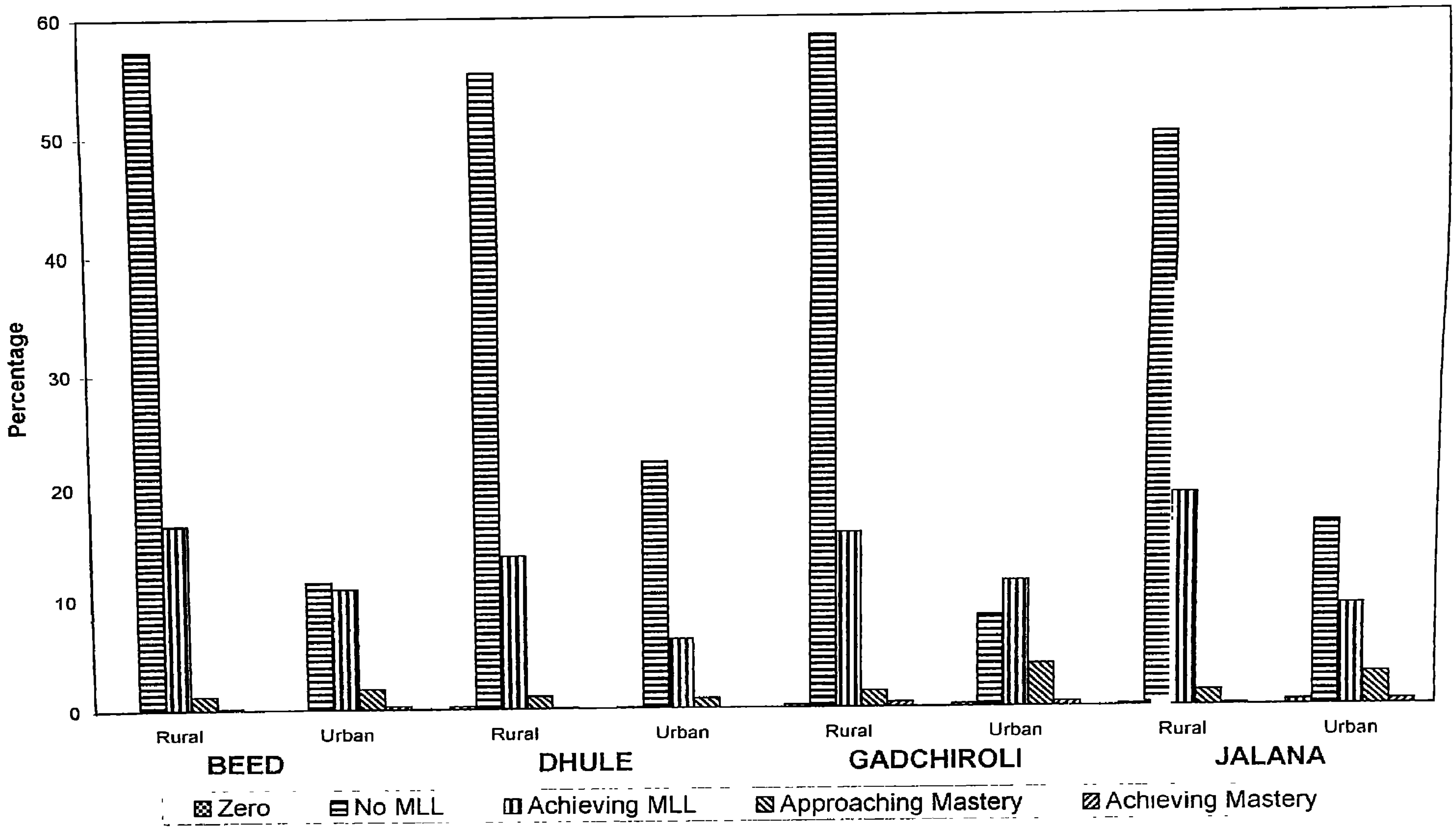


Table 9.17 : Percentage Distribution of Students on the Basis of Levels of Achievement in Mathematics (Categorywise)

Levels	Districts															
	Beed				Dhule				Gadchiroli				Jalana			
	SC	ST	OBC	Others	SC	ST	OBC	Others	SC	ST	OBC	Others	SC	ST	OBC	Others
Zero	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO MLL	11.58	1.55	12.85	42.94	10.10	1.35	11.21	37.44	17.12	2.30	19.00	63.47	12.50	1.68	13.87	46.34
Achieving MLL	3.25	0.28	4.66	19.35	2.83	0.25	4.06	16.87	4.80	0.42	6.89	28.60	3.51	0.30	5.03	20.88
Approaching Mastery	0.28	0.00	1.13	1.69	0.25	0.00	0.99	1.48	0.42	0.00	1.67	2.51	0.30	0.00	1.22	1.83
Achieving Mastery	0.00	0.00	0.14	0.28	0.00	0.00	0.12	0.25	0.00	0.00	0.21	0.42	0.00	0.00	0.15	0.30

Categorywise distribution of students achievement levels in Mathematics test gives the same picture (Table 9.17) as seen in case of Rural and Urban students.

Variations were further observed within genderwise, areawise and category-wise achievement levels (Table 9.15, Table 9.16 & Table 9.17).

Table 9.18 : Correlation Between Achievement in Mathematics and Language

Language Variables	Districts Beed	Dhule	Gadchiroli	Jalana
Word Meaning Total (TOT 1)	0.29	0.36	0.36	0 35
Word Meaning Antonyms (WMA)	0.28	0.33	0.34	0.25
Word Meaning Synonyms (WMS)	0.21	0.24	0.23	0 30
Reading Comprehension Total (TOT2)	0.54	0.49	0 59	0 53
Reading Comprehension of Factual Detail (RCF)	0.49	0.46	0.52	0.49
Reading Comprehension of Inference (RCI)	0.50	0.40	0.52	0.48
Reading Comprehension of Title/Central Idea(RCC)	0.04	0.03	0.08	0 16

Reading comprehension scores in Language and achievement scores in Mathematics show quite high correlations (Table 9.18) in all the four districts. It indicates that weak reading comprehension in language is one of the causes of low achievement in Mathematics (r = 0.40 to 0.59).It is the highest in Gadchiroli (0.59) followed by Beed (0.54) ,Jalana (0.53), & Dhule (0.40).

3. Areas of Difficulty

Table 9.19 : Areas of Difficulty in Word Meaning

			Percentage of Students Who Did Not Complete the Item (Synonyms/Antonyms) Districts							
			Beed		Dhule		Gadchiroli		Jalana	
Sr.No.	Item No.	Description	Syno	Anton	Syno	Anton	Syno	Anton	Syno	Anton
1	1	Dayalu- Kathor		41.95		42.24		52.82		40.40
2	2	Krida - Khel	44.77		53.57		56.78		48.02	
3	3	Dubla-Ashakt	53.39		58.13		57.20		58.84	
4	4	Samudra-Sagar	40.40		43.47		46.14		40.09	
5	5	Aasha- Nirasha		40.11		48.65		44.68		41.92
6	6	Kashta- Dookh	51.69		61.65		54.28		52.13	
7	7	Shudha-Ashudha		47.46		48.28		48.23		44.66
8	8	Deshi-Pardeshi		57.49		53.45		50.73		45.58
9	9	Sthan- Jaga	53.95		57.27		56.37		52.59	
10	10	Shaury-Parakram	52.68			57.64		52.61		51.52
11	11	Shatru- Mitra		45.76		42.00		41.96		44.82
12	12	Akash- Abhal	41.81		48.40		45.51		44.05	
13	13	Dnyan - Adnyan		47.46		46.31		49.06		47.10
14	14	Chatur - Murkha		41.24		58.74		45.51		39.33
15	15	Kathin - Sopa		46.33		46.92		43.01		43.90
16	16	Vishal - Lahan		48.87		57.39		57.62		41.62
17	17	Prasanna - Khinna		49.15		49.38		50.73		49.24
18	18	Prakash - Andhar		43.64		55.42		43.42		38.87
19	19	Suruwat - Shevat		43.93		48.15		50.94		43.90
20	20	Jag - Vishwa	53.25		54.80		55.74		54.73	

An analysis of itemwise performance of students in the Language Test (Word Meaning) is presented in Table 9.19. Percentage of students who did not complete the item is very high.

Table 9.20 explains the areas of difficulty in Reading Comprehension test. All the areas - direct factual information, drawing inferences and getting to the central idea of the passage were found to be difficult . This area needs effective training for teachers to improve reading comprehension of students.

Figures 9.15 , 9.15 a . 9.15b, 9.15c , 9.15d and 9. 16 illustrate the nature of performance of Class IV students in the four districts.

Table 9.20 : Areas of Difficulty in Reading Comprehension

Percentage of Students Who Did Not Complete the Item Reading Comprehension

				Districts			
Sr.No.	**Item No.**	**Description**		**Beed**	**Dhule**	**Gadchiroli**	**Jalana**
1	21	Factual	F	40.40	64.16	44.47	39.18
2	22	Inference	I	40.54	53.57	43.42	41.01
3	23	Inference	I	63.42	67.24	65.76	65.85
4	24	Inference	I	50.71	68.23	63.05	59.91
5	25	Factual	F	54.24	62.68	57.83	55.64
6	26	Factual	F	47.46	58.50	54.49	46.19
7	27	Factual	F	55.37	64.41	58.87	53.20
8	28	Factual	F	59.18	63.05	63.05	63.72
9	29	Factual	F	68.93	72.29	69.94	68.29
10	30	Inference	I	72.03	79.68	74.32	73.78
11	31	Factual	F	64.12	71.31	65.55	64.18
12	32	Inference	I	65.54	72.41	68.06	62.50
13	33	Factual	F	62.57	72.78	56.37	61.43
14	34	Factual	F	65.11	63.30	67.85	64.33
15	35	Factual	F	63.42	73.52	64.30	64.94
16	36	Factual	F	63.70	69.33	57.41	60.67
17	37	Inference	I	58.05	68.72	68.48	64.63
18	38	Factual	F	63.14	66.50	69.10	63.57
19	39	Inference	I	55.51	62.93	60.54	58.54
20	40	Inference	I	58.76	65.89	61.80	60.98
21	41	Inference	I	70.76	83.87	78.29	78.35
22	42	Inference	I	71.19	77.59	72.03	68.90
23	43	Inference	I	74.86	74.75	70.77	69.36
24	44	Title	T	76.84	78.69	82.88	78.81

Areas of Difficulty

Difficult items in the Mathematics test were identified . Those are given in Table 9.21. Representation of shaded portion into fraction was the most difficult item. 80.41 % students could not complete the item.

Students found the concept of multiplying a number by zero difficult. Place value conversion, addition even and odd numbers , division / estimation and unit of capacity were the other difficult items . **Figures 9.15, 9.15a, 9.15b, 9.15c, 9.15d and 9.16** describe the nature of performance of students in Mathematics. The graphs are skewed to the left showing poor performance of students.

Table 9.21: Areas of Difficulty in Mathematics

Sr. No.	Item No.	Description	Percentage of Students Who Did not Complete the Item
1	30	Multiplication of 0	75.93
2	8	Conversion of Units of Weight	73.15
3	1	Addition	45.76
4	21	Representation of Shaded Portion into Fraction	80.41
5	**	Representation of Shaded Portion into Decimal	NA
6	32	Division / Estimation	67.27
7	37	Even / Odd Numbers	72.28
8	31	Unit of Capacity	68.55
9	3	Place Value Comparison	72.28
10	**	LCM of two numbers when one is a factor of another	NA

Table 9.22 and Table 9.23 describe the performance of schools on the Tests in Language and Mathematics. The variation amongst schools within each of these districts was marked in both Language and Mathematics. Out of 45 schools in Beed, Dhule, Gadchiroli and Jalana districts, 20%, 51%, 35.56% and 15.56% schools were below the 40% level of achievement in Language .

In Gadchiroli there was one school with an average score 5 as minimum. This means that all sampled children in Class IV from this school could do only five items correctly. The situation was even worse in Mathematics .

Out of 45 schools in Beed , Dhule , Gadchiroli and Jalana districts 86%, 93%, 77% and 77% schools did not reach the desired MLLs. There was one school in Dhule and Gadchiroli district with a score as 3 implying that all Sampled children in Class IV from this school could do only three items out of 40 correctly .

Table 9.22 : Average Scores of Schools in Language

	Districts			
Scores	Beed	Dhule	Gadchiroli	Jalana
Below 40 Percent	20.00	51.00	35.56	15.56
Maximum	0.00	0.00	0.00	0.00
Minimum	0.00	0.00	0.00	0.00

Table 9.23 : Average Scores of Schools in Mathematics

	Districts			
Scores	Beed	Dhule	Gadchiroli	Jalana
Below 40 Percent	68.93	77.96	67.01	67.07
Maximum	4.24	3.57	3.55	4.88
Minimum	6.92	6.28	8.56	9.60

A detailed schoolwise analysis needs to be carried out. Case Studies of all such schools lying at the lowest side of the scores, Threshold and Mastery levels of learning achievement will be useful in formulation of action plans as per the needs of individual or a group of schools in the district. An institutional planning with a focus on the school as a basic unit of planning and development is recommended here.

□

CHAPTER 10

IMPLICATIONS OF THE STUDY

Implications of the study are given in this chapter.

The Baseline Assessment Study was carried out in Beed, Dhule, Gadchiroli and Jalana districts brought under the DPEP - Phase II with a view to collecting detailed information about various variables affecting the quality of education at the primary school level in these four districts in general and learning Achievement of children in particular.

The data gathered, when analysed, have brought out a number of findings which have a variety of implications for planning and designing suitable intervention strategies at the district level. The results of this study have implications mainly for the districts under study.

Major Implications of the Study are discussed under following headings:

1. Learning Achievement Level of Students
2. Dropouts
3. Teacher and Head Teacher
4. School and Participation

1. Learning Achievement Level of Students

1. About 6 - 15 percent students from Class IV reached the MLLs. This indicates very low attainment level of students. The sampled students performed better on Word Meaning test than Reading Comprehension. The minimum score was 5 out of 44 in Gadchiroli district as compared to 10, 11 and 13 in Beed, Dhule and Jalana districts respectively. Boys performed better than girls. The maximum score was 29 out of 44 in Jalana district when compared to the scores 23, 25 and 27 in Gadchiroli, Beed and Dhule districts respectively.

2. Achievement level in Language was very low with 16 - 27 percent students not reaching the minimum of 40 percent in Word Meaning, while 62 to 79 percent could not reach MLLs on Reading ComprehensionTest. About 21 - 26 percent students approached the Mastery level in Word Meaning, whereas only 5 - 11 percent reached Mastery level in Reading Comprehension. Only 4 - 7 percent students could achieve Mastery in Word Meaning, whereas 2 - 7 percent could reach this levl in Reading Comprehension.

3. The performance of sampled students in Mathematics was poorer than in Language with a minimum score of 3 out of 40 in Dhule and Gadchiroli districts. Boys in Beed, Dhule and Jalana districts performed better than girls. Students from rural schools showed superiority over their urban counterparts. This needs further research.

Achievement levels differed from group to group in all the four districts Such a poor performance at the end of four years of schooling is an indicator of poor and ineffective educational process.

4. About 66 - 78 percent sampled students failed to achieve MLLs in all the four districts. No girls were found achieving Mastery level in Beed, Dhule and Jalana districts, while Gadchiroli had only 0.84 percent girls achieving Mastery level.

5. Castewise performance of students indicated that the SC and ST category students achieved low scores . A negligible percentage of students from ST category could achieve the MLLs . Specific interventions need to be introduced to raise the achievement level of ST students .

6. Schoolwise analyses revealed that 40 - 57 percent schools scored below 40 percent in Language , whereas this number rose to 67 - 78 percent for Mathematics. School based plans and specific intervention strategies need to be implemented for improving the level of achievement of Class IV students in Language and Mathematics.

Learning Achievement of Class II Students

1. The performance of Class II students was quite unsatisfactory in Literacy and Numeracy both . They did better in Letter Reading than Word Reading. They experienced more difficulty while reading words than reading letters.

2. There were areawise variations . Rural school students performed better than the urban students in all the four districts. Urban school students showed poor performance, as bright students joined private schools . This was observed almost in all districts. This requires review of policy and planning .

3. About 20 - 39 percent Class II students in all the districts could not achieve MLLs in Letter Reading while about 39 - 65 percent students could not do so in Word Reading. Percentage of students achieving Mastery in Letter Reading ranged from 37 - 67 percent. It was the lowest for Dhule , while a large percentage of students was seen in Beed (66.67%) district.

4. In Mathematics students showed a better performance in Number Recognition than Addition and Subtraction. Boys performed better than girls in achieving Mastery in Numeracy in all the four districts. There were differences between various groups. Low achievement level in Class II may be one of the causes of poor performance at Class IV level.

5. About 10 -18 percent students in Class II remained at zero level of Number Recognition competency , whereas this figure rose to 17 to 40 percent on Addition and Subtraction competencies. Nearly 18 - 45 percent students in all the four districts could achieve Mastery in Number Recognition competency , while 16 - 46 percent students achieved

mastery level in Numeracy - Addition & Subtraction competency. This indicates that students could do mental operations more easily than recognising or reading and writing numbers. Effective learning experiences need to be given in Number Recognition competency.

2. Dropouts

It was observed that very few schools had maintained the record of dropouts. Some scanty record about dropouts was found in a few schools, but it did not reveal a true picture of the actual dropout situation. Home visits for recording information about dropouts as well as long absentees should be made. Special training for maintaining this kind of records be organized at BRC and CPS or suitable levels. Learning achievement level of dropouts was very low, in both Literacy and Numeracy. About 22 to 65 percent dropouts could not even achieve the MLLs (Table 6.24).

The sampled dropouts (281) were classified under SC, ST, OBC and Others categories. Majority of the sampled dropouts belonged to Others category. It was found that most of the dropouts, boys and girls both, repeated a class either once or twice. This reflects on the quality of classroom teaching which needs to be improved.

Some of the reasons given for discontinuing studies by dropouts were : **Finding studies too difficult, Parents do not want them to study and Having to assist in Household work Poor attendance , multi-grade teaching situation , inability of children to understand the language used by the teacher in Class I and Class IV** were some of the reasons given by the teachers, for dropouts , when interviewed. This needs further research with in-depth studies in tribal blocks of Dhule and Gadchiroli districts.

3. The Teacher and The Head Teacher

The Teacher

Students in the tribal blocks of Dhule and Gadchiroli found the teacher's language used in the classroom very difficult to understand. The study revealed that the teachers appointed (transferred) in those areas spoke a different language and the children spoke in their own dialect. There was a variety of tribal dialects too. A special care needs to be taken for recruiting, posting and transferring of suitable teachers in these areas or giving training for countering such difficulty.

Area specific and effective training programmes for those who are already in service need to be organised .

The study revealed that the basic facilities required for teaching learning were available in schools. The teachers (30 - 43 %) reported the need of teacher's guides (Table 5.10) . It was observed that the material supplied under OB scheme was available in most of the schools covered by the scheme. But the material was hardly used in the classroom. It was found lying open. Most of the head teachers and teachers did not even open the Science or the Mathematics Kit boxes.

A large number of schools had colour TV sets with no electric connection for

the school. The teachers relied heavily on the extensive use of textbooks in the class, yet the students could not even read the textbooks properly. Teaching style and associated activities need immediate attention for improving the teaching and learning in lower classes.

Multigrade teaching situation (32 - 66 %) prevailed in most of the schools under study (Table 5.11) . Students in Class IV and Class II showed poor performance in Language and Mathematics tests. It was observed during the field survey that most of the teachers did not provide proper feedback to students . They devoted least time for correction of tests and homework. In short, a more effective pattern of multigrade teaching needs to be evolved for effective teaching and learning.

The data revealed that the head teacher and BEO visited classrooms regularly as a routine . But the teachers could not receive proper academic guidance. Plans need to be developed at BRC / CPS level to facilitate interactions for improving classroom teaching practices. Lack of supervision and guidance hampered the competence of teachers in carrying out related activities in schools. Inter personal relations need to be improved.

Majority of teachers did not receive any kind of in- service training in the last five years. More than 78 % percent teachers (78 - 93 %) expressed their desire to undergo in- service training (Table 5.8). Plans need to be developed for need based in-service teacher training programmes at district level with a system of monitoring and evaluation for effective transaction of the same.

Infrastructure at CPS and BRC and DIETs needs to be strengthened for effective implementation of in-service training programmes. This may increase school - school and teacher - teacher interactions and provide fellow teacher support, expertise and a common forum for teachers to exchange ideas and discuss various issues and problems in day to day teaching and learning in lower classes.

The head Teacher

Genderwise and categorywise differences were observed in the sampled head teachers. Majority of the head teachers were from SC (9 - 33 %) & ST (67- 91%) category. Percentage of head teachers belonging to ST category was the highest (67- 91 %) in all the four districts. About 78- 96 percent of head teachers were males , whereas the percentage of female teachers ranged from 4 to 22 percent .

Percentage of female head teachers in Jalana district was the least (4%) . Recruitment and promotion policies need to be reviewed. More representation of able women head teachers may help in increasing the enrolment and retention of girls. Achievement level of students was found very low in all the four districts.

Head teachers reported that they spent most of their time in administrative and non-academic activities. They could hardly give academic guidance to teachers. They visited the classrooms as a routine. Low achievement of students was attributed to teachers and students and not to themselves. They reported that the teachers lacked proper attitude, commitment and motivation to work hard for improving quality of education at the primary school level.

4. School and Participation

Almost all sampled schools had buildings either of their own or rent free (Table 4.10). A large number of schools required two or three additional classrooms and about 4% schools required more than five classrooms in all the four districts (Table 4.13).

A fairly large proportion of schools did not have the basic facilities of safe drinking water and separate toilets for girls (Table 4.14) . Teaching material and blackboards were reported to be available in all schools, but were found in bad condition for use. School buildings lacked regular maintenance and needed major repairs.

A high percentage of sampled schools reported that they could not receive financial support from the community (Table 4.23). Enrolment of girls in all classes and or districts was lower than boys with a progressive decline in their number from Class I to Class IV. The decline was also seen in the average class size from class I to Class IV (Table 4.5).

Launching of awareness generation campaigns are suggested to increase girls' participation and improve upon their retention rate in schools. As it was observed that the school records were not maintained properly for various reasons, teachers and head teachers need to be trained in keeping , updating and maintaining school records which can be used for effective planning in future.

Conclusion

Micro-plans based on schoolwise surveys need to be developed on priority basis in all the four DPEP districts.

The issues may be resolved by introducing following interventions :

1. Training of head teachers in school management.
2. Increasing interactions between the schools in one CPS complex.
3. Exploring opportunities to Village Education Committee members to interact with the VEC members in another school and /or CPS complex. This may improve the issues related to support, supervision and monitoring of school activities.
4. Making arrangements for regular meetings and discussions at the school, CPS , BRC , DIETs and district level.
5. Planning and organising school based recurrent and effective training programmes with a greater emphasis on activity based and joyful learning.

References

1. Banthia J. K. (1991) : *Census of India 1991* Series - 14 Maharashtra Part II of 1991. Provisional Population Totals, Rural - Urban Distribution. Director of Census Operations, Maharashtra, Bombay .

2. Jangira N.K. & Sandhya Paranjape (1995) : *Learning Achievement of Children At The Primary Level* . A Baseline Assessment Study in the three Districts of Maharashtra. Department of Teacher Education and Special Education, NCERT, New Delhi- 110 016.

3. Mahana P. P. (1983) : *Census of India 1981* Series - 12 Maharashtra , Part II- A General Population Totals. Director of Census Operations, Maharashtra, Bombay .

4. Mahana P. P. (1983) : *Census of India 1981* Series - 12 Maharashtra, Part II- B Primary Census Abstract .
   Director of Census Operations, Maharashtra, Bombay .

5. Ved Prakash & Others (1996) : *A Framework For Data Analysis of Baseline Assessment Study.*
   Navodaya Vidyalaya Cell, NCERT, New Delhi- 110 016.

6. *District Primary Education Project (DPEP)* , A Baseline Assessment Study - A Training Manual.
   Department of Teacher Education and Special Education , NCERT, New Delhi - 110 016.

7. *District Primary Education Programme (1993)* State Project Report , Maharashtra State ,
   Department of School Education , Government of Maharashtra.Mantralaya, Bombay- 400 032.

8. *Education At a Glance (1993- 94)*
   Directorate of Education , Maharashtra State, Pune - 411 001.

9. *Education At a Glance (1994- 95)*
   Directorate of Education , Maharashtra State, Pune - 411 001.

10. *State Programme of Action 1992* .
    Department of School Education , Government of Maharashtra. Mantralaya, Bombay- 400 032.

11. *General Geography Std III (Ed. 1993)- Beed District*
Maharashtra State Bureau of Textbook Production and Curriculum Research,
Pune - 411 004.

12. *General Geography Std III (Ed. 1993)- Dhule District*
Maharashtra State Bureau of Textbook Production and Curriculum Research,
Pune - 411 004.

13. *General Geography Std III (Ed. 1993)- Gadchiroli District .*
Maharashtra State Bureau of Textbook Production and Curriculum Research,
Pune - 411 004.

14. *General Geography Std III (Ed. 1993)- Jalana District.*
Maharashtra State Bureau of Textbook Production and Curriculum Research,
Pune - 411 004.

15. *Maharashtra Geography Std IV (Ed. 1994).*
Maharashtra State Bureau of Textbook Production and Curriculum Research,
Pune - 411 004.